KING COUNTY AUDITOR'S OFFICE

I-Net Performance Measures

September 26, 2002

Pacific Technologies, Inc.

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PTI Practical Planning Positive Change

September 26, 2002

King County Auditor's Office
Attn: Ron Perry
Principal Management Auditor
King County Courthouse
516 Third Ave, Room W1020
Seattle, WA 98104-3272

Dear Ron:

Pacific Technologies, Inc. is pleased to present the final version of our *King County I-Net Performance Measures Report*. The document details the findings, analysis, and recommendations resulting from our work on the King County Institutional Network (I-Net) performance measures and market assessment project, begun in February 2002.

We have provided 25 bound copies, 1 unbound copy, and an electronic copy of the deliverable.

I would like to take this opportunity to thank you, the project's task force, and the County staff and Council members and staff for actively participating in this effort. Your ready availability and candid feedback were much appreciated. The task force provided invaluable input into the development of the recommended performance measures. It included:

- Jed Moffit, King County Library System
- Dana Spencer, Office of Information Resources Management
- Leslie Addis, King County Budget Office
- Kevin Kearns, King County Information and Telecommunication Services Division (ITS)
- John Anthony, King County ITS
- Barbara Larson, King County I-Net
- Mike Alvine, King County Council
- David Randall, King County Council's Office
- Janet Turpen, AT&T Broadband
- Pat Sullivan, King County Council
- Cheryle Broom, King County Auditor
- Ron Perry, King County Auditor's Office (Chair)

I would also like to thank the staff at ITS for taking the time to provide detailed comments on the draft report.

Please call me at (425) 881-3991 if you have any questions about this deliverable. I look forward to working with you again.

Sincerely,

Michael Silverman
Pacific Technologies, Inc.

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executive summary

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I-NET PERFORMANCE MEASURES

EXECUTIVE SUMMARY

OVERVIEW

In February of this year, the King County Auditor's Office contracted with Pacific Technologies, Inc. (PTI) to assist with development of a set of performance measures and associated benchmarks for the County's I-Net project. PTI's scope also included recommending data collection and reporting approaches, performing market research, and developing financial models. This report presents the results of those efforts, along with related findings and recommendations.

This project created tools County stakeholders can use to evaluate I-Net's performance. These tools should be deployed, and adjusted as necessary, to ensure that they support the desired degree of oversight. This engagement also identified areas of concern – and opportunity – that the County must address if the I-Net is to be considered successful, both internally, and with its customers. Appropriate management attention to these areas will help improve the I-Net's chance for success.

PTI concludes that I-Net's current financial model is optimistic. It assumes very high market penetration, increasing rates, flat expenses, and limited capital investment. A significantly increased emphasis on marketing is recommended to help improve the likelihood that I-Net will maintain financial viability in future years. If I-Net assumptions prove inaccurate, actual revenue will fall below projected levels. A small reduction in revenue will make less money available for an already limited equipment replacement fund. Significantly less revenue will require a reduction in operating expenses for I-Net to remain a self-sustaining enterprise.

A task force convened by PTI completed its goal of developing performance measures and a format for reporting and tracking I-Net's progress. PTI notes that I-Net overall lacks the underpinning of a formal strategic plan, complete with a mission/vision statement, goals and objectives, and a business plan. PTI recommends I-Net develop a strategic plan, including a business plan that will complement the performance measures reported in this report.

In short, if I-Net is to succeed operationally and become financially viable and self-sufficient, it will have to be more private sector or business-like in its approach to planning, marketing, and managing/tracking its use of resources.

I-NET

The I-Net, or Institutional Network, is an asset built for, leased to, and maintained for the County by AT&T as part of its 1996 cable franchise agreement. According to Information and Telecommunication Services (ITS), the fiber optic network is capable of connecting over 279 facilities, including numerous non-County sites, such as schools, libraries, and municipalities. I-Net customers (including internal County departments) enter into paid contracts for I-Net service bundles (e.g., site to site connectivity, Internet access, etc.). ITS indicated that I-Net has 73 possible customers, including the County. The introduction of the report, Chapter One, provides a broader overview of the I-Net.

PROJECT PURPOSE

The Auditor's Office initiated this project at the direction of the County Council. In pursuing this effort, the Council was following up on recommendations made in a larger, previous assessment of the I-Net. The expected outcome of this engagement is a set of tools the Council can use to better evaluate the I-Net's performance.

METHODOLOGY

Under the direction of the Auditor's Office, PTI worked with the County to charter a task force comprised of I-Net stakeholders from both within and outside the County. This group contributed significantly to the project's work products.

Over the course of the engagement, PTI conducted a kickoff and five workshops with the task force. The first workshop laid the groundwork for the rest of the efforts by identifying unofficial County goals for I-Net and establishing categories of performance measures. PTI used the subsequent workshops to refine, validate, and ultimately reach consensus on specific performance measures for I-Net. We also conducted numerous interviews with County stakeholders.

PTI worked with the Auditor's Office on several related efforts as well. This included conducting a survey to update I-Net market information, comparing the County's I-Net with a sampling of other similar efforts (Appendix C), and developing alternative financial forecasts for I-Net operations (Appendix B). ITS also supplied available performance measures for I-Net (Appendix F).

PROJECT OUTCOMES

FINDINGS

Through the process of conducting this project, we identified several findings related to the County's I-Net efforts. Chapter Two presents completed findings. The following summarizes the findings in four key areas:

- **Customers:** I-Net offers a good value for some of its potential market, is of limited value for others, but has generally been less than effective in clearly demonstrating its merits to potential customers
- **Operations:** I-Net has been running successfully and performing above SLA commitments, and recent hires bring necessary private sector experience to the management team; several areas exist for I-Net to perform more competitively, including better reporting on performance to customers and providing products better targeted to less sophisticated customers
- **Policy and Decision Making:** While I-Net has numerous planning and operational documents, they are largely outdated and/or not cohesive; I-Net ultimately lacks clearly documented and communicated business objectives and policy goals, resulting in intra-County confusion and disagreements, and concern in potential customers around the lack of direction
- **Financial:** Models indicate that I-Net may have difficulty meeting its goal of complete financial self-sufficiency – we found that ITS' financial model relied on the following relatively optimistic assumptions:
  - 100% of existing customers are retained
  - 87% market penetration is achieved
  - Rates will increase
  - Operating expenses remain flat
  - A technology shift requiring major capital investment will not occur

RECOMMENDATIONS

Attendant to the findings listed above, PTI identified the following recommendations and related I-Net progress to date:

- **Establish a formal strategic plan for I-Net** – I-Net is currently working on a business plan
- **Focus on improving marketing efforts –** A marketing resource has been hired and the strategic business plan is anticipated to include forward-looking, detailed marketing plans
- **Approach management and operations in a manner similar to a private enterprise–** Recent new hires bring private sector experience to I-Net
- **Closely monitor financial performance – and be prepared to reduce operating costs if necessary –** I-Net is expected to begin tracking this area carefully and identify potential areas of cost reduction

Chapter Two further details the findings and recommendations.

PERFORMANCE MEASURES

Each column in the table on the following page presents a recommended performance measure category and its associated measures.

Financial Measures	Technical Measures	Customer Satisfaction Measures	Market Performance Measures
Fund balance	Actual bandwidth saturation	Network latency	Number of customer contacts per quarter
Revenue distribution between KC vs. external sources	Actual bandwidth utilization	System availability	Number of mailings per quarter
Capital reserve	Committed utilization	Maintenance window	Number of community interest meetings per quarter
Capital expenditure	Planned committed utilization	Reliability	Number of on-site visits per quarter
Operating costs per site		Problem reporting and escalation procedures	Percentage of dark fiber sites vs. full service sites
Earned revenue per site		Problem escalation	Future months booked under contract
Actual vs. projected revenue		New service	Future months projected under contract
Actual vs. projected operating costs		Circuit changes	Percentage of actual customers to total possible customers
Rate differential		Survey results	Percentage of active sites to total possible sites
$/Mbps differential		Number of applications	Number of expired contracts that are renewed
Number of new I-Net circuits			Flat/direct service rate comparison
			$/Mbps service rate comparison

Chapter Three contains descriptions of these measures, their associated benchmarks, and data gathering approaches. Chapter Four provides suggested reporting formats. Appendix F presents performance measure actuals to date, provided by ITS.

Overall, PTI developed a relatively large set of metrics in this project. Over time, I-Net should reduce this set and/or refine the measures as the actual data is captured and evaluated with an emphasis on retaining the metrics that most accurately reflect I-Net's performance.

CHAPTER 1

introduction

PROJECT BACKGROUND

In February of 2002, the King County Auditor's Office hired Pacific Technologies, Inc. (PTI) to lead a County task force in developing recommended performance measures for its Institutional Network (I-Net) project. This effort, begun at the request of Council, follows up a prior review and assessment of I-Net completed in September 2001.

I-NET BACKGROUND

King County's Institutional Network is a fiber optic network built for the County by AT&T as a condition of its franchise agreement in 1996. AT&T built the network with 'Public, Educational, and Government' (PEG) fees paid by cable subscribers, capital grants, and a bond. The County leases the I-Net fiber from AT&T, who maintains the shared network. When completed, the network will be capable of connecting over 279 sites in King County – including County facilities, nearly all King County libraries, as well as municipalities, school districts, and other public and non-profit organizations.

The County is offering use of this network to connected organizations as a fee-based value-added service. The standard service provides Internet access and high speed connectivity to other connected sites. Each customer may have one or more sites. Cost per site for basic service ranges from $700 to $800 a month depending on the length of the contract. Agencies with access to multiple sites can also choose to connect their other sites themselves using I-Net fiber if they subscribe to the standard service at one site. This option runs from $300 to $350 a month per additional site, also depending on contract length. The agency is responsible for installing and maintaining the required equipment. The County is currently exploring additional service packages.

I-Net went into operation in July 2001 and forecasts contracts in place with approximately 10 customers and 127 sites as well as contract negotiations with approximately 10 customers and 27 sites by the end of 2002. As of Q2 2002, I-Net supports seven customers with 94 full-service sites and one customer with 21 dark fiber sites.

PROJECT SCOPE

In this study, PTI adopted the objectives set forth by the King County Auditor's Office. Our scope of work included:

- Developing a manageable set of I-Net performance measures
- Crafting a data tracking and reporting plan for the I-Net
- Updating a previous assessment of I-Net's market
- Building a financial model with multiple scenarios
- Presenting available data for the I-Net performance measures
- Presenting associated findings and recommendations

DEVELOPING A MANAGEABLE SET OF I-NET PERFORMANCE MEASURES

To meet this objective, PTI reviewed existing documentation to gain a better understanding of I-Net goals, policies, financial information, and previous studies related to the I-Net project. Along with the Auditor's Office, we helped to establish a project task force that worked with PTI throughout the engagement in a series of workshops and validation sessions. Please see Appendix E for task force membership. We also conducted interviews with County staff and external I-Net stakeholders. Drawing upon this first-hand input, financial analysis, and market research – as well as PTI's professional experience – our team developed a set of I-Net performance measures and benchmarks.

CRAFTING A DATA TRACKING AND REPORTING PLAN FOR THE I-NET

Once the task force agreed upon the measures and benchmarks, PTI developed associated data collection and reporting plans. We evaluated the availability and accessibility of data sources, identified where new data collection mechanisms would be required, and developed a schedule and approach for collecting the data. Our work also laid out a plan for reporting on the defined benchmarks. Finally, we recommended specific report timing (e.g., monthly, quarterly, etc.), design, and layouts.

UPDATING A PREVIOUS ASSESSMENT OF I-NET'S MARKET

PTI conducted a market survey, using relevant questions from the survey created for the County's 2001 I-Net review and assessment. We contacted 66 organizations with sites that are connected to the I-Net, but have not yet contracted for service; we received responses from 42 organizations. To supplement our analysis, PTI also contacted other jurisdictions that have implemented I-Nets to consider other business models and identify relevant best practices.

BUILDING A FINANCIAL MODEL WITH MULTIPLE SCENARIOS

Based on data from the County, market research, survey findings, and varying assumptions about rates and market penetration, PTI developed alternative financial scenarios for I-Net.

PRESENTING AVAILABLE DATA FOR THE I-NET PERFORMANCE MEASURES

PTI incorporated I-Net-related data available from ITS into our recommend report format and layout to provide an initial view of I-Net's progress in terms of the performance measures defined in this project.

PRESENTING ASSOCIATED FINDINGS AND RECOMMENDATIONS

The Auditor's Office requested that PTI summarize our major findings and associated recommendations. Accordingly, this report provides that information.

REPORT ORGANIZATION

The remainder of this document presents the performance measures and major findings that came from our workshops, research, and analysis, as follows:

- **Chapter 2: Findings and Recommendations** discusses the key findings and results of our market research, Council and management interviews, project workshops with the County, and financial analysis
- **Chapter 3: Performance Measures** describes the process of developing the metrics and presents the performance measures and benchmarks, data collection plan, and report mock-up
- **Chapter 4: Sample Performance Measures Report** lays out the possible presentation and format of the performance measures in a report mock-up
- **Appendices** provide background and supplemental documentation, including the market survey results, I-Net financial model, research results of other I-Nets, the list of participants, the task force charter, and available I-Net performance measures to date

CHAPTER 2

findings and recommendations

This chapter presents PTI's findings and associated recommendations. Although much of the project focus was on performance measures, PTI did have related findings and recommendations – the Auditor's Office asked that we include them in this document.

We based our findings on the information gathered from the customer market survey results; financial analysis; one-on-one interviews with King County staff, Council members, and other I-Net stakeholders; and research on other public I-Nets. We also made recommendations based on our findings and understanding of the I-Net.

Findings are organized into four sections:

- **Customers/Marketing** – lists findings related to I-Net's service offerings, potential competitors and customers, marketing strategy, and communications; it includes key learnings from the updated I-Net market survey
- **Operations** – presents findings related to I-Net's network and operations management
- **Finance** – contains findings that are related to I-Net's financial plan and performance measures, including findings associated with the development and assumptions of the financial model
- **Policy** – has findings related to I-Net's overall policy objectives, I-Net's franchise agreement, Council perspective, and leadership

Major recommendations are presented at the end of this chapter.

FINDINGS

CUSTOMERS/MARKETING

Market research indicated that I-Net services could be a cost-effective, valuable network option for some potential customers. However, a combination of factors, including marketing effectiveness, competitive private-sector and education-focused service offerings, and a poor perception of King County as a service provider by some potential customers, present stumbling blocks for I-Net. These points are discussed in further detail below.

C1. I-Net offers value to some customers who are not well served by the private sector. For municipalities that cannot get reliable or cost-effective service from private sector carriers, or who need an access provider to the State's Intergovernmental Network (IGN), I-Net offers a compelling service bundle of high speed Internet and WAN connectivity. The I-Net service bundle gives customers the opportunity to consolidate their current spending on separate ISP and State network connections, typically saving them money.

C2. I-Net marketing has not been effectively developed or executed:

- **Currently, no formal marketing plan exists.** Several efforts have been made around marketing and planning, but none have documented a detailed plan for new markets, product strategies, sales tactics, etc. Without such a plan, I-Net has neither a roadmap for how it will acquire new customers, nor a tactical guide for efforts such as sales calls, direct mailings, and community interest meetings. The lack of a plan has damaged I-Net's credibility within the County and also makes it difficult to use actual performance to assess the validity of I-Net market penetration assumptions.
- **Many customers do not fully understand products and services.** It became clear from talking with I-Net market survey participants that potential customers frequently are unaware of I-Net detailed offerings or prices, even though a high number had indicated that they were familiar with I-Net. For example, many were unaware that I-Net offered access to IGN. Two potential customers, the City of Kirkland and the City of Bellevue did not consider I-Net during recent, related procurements.
- **Understanding of I-Net varies widely among King County staff and Council members.** Interviews with County staff and Council members revealed that many held differing perceptions of I-Net's scope and services, suggesting that any internal marketing

messages around I-Net purpose, technology, or services had not been successfully communicated within the County.

C3. Schools are a critical market for I-Net to penetrate. Schools and related agencies represent approximately 39% of remaining potential I-Net customers and approximately 65% of remaining potential I-Net sites. However, schools typically have low budgets and some schools only have a portion of their sites on the I-Net.

C4. Many I-Net connection points have private sector competition. Many I-Net sites are in areas well served by the private sector, requiring I-Net to remain competitive with local telecommunications providers.

C5. Doubts exist that I-Net will be able to keep up with private sector offerings. Some interview and survey participants are skeptical about I-Net's future viability, both in terms of technical offering (e.g. speed, technology, access, etc.) as well as price competitiveness. In some areas of the County, private rates are becoming competitive with I-Net services. For example, recent procurements on the East side for Internet services yielded similar or even lower costs for similar service levels.

C6. Municipal dissatisfaction with the County as a whole has influenced their unwillingness to consider I-Net. Some potential customers indicated that their poor relationship with the County was an important reason for their lack of interest in signing up for I-Net services.

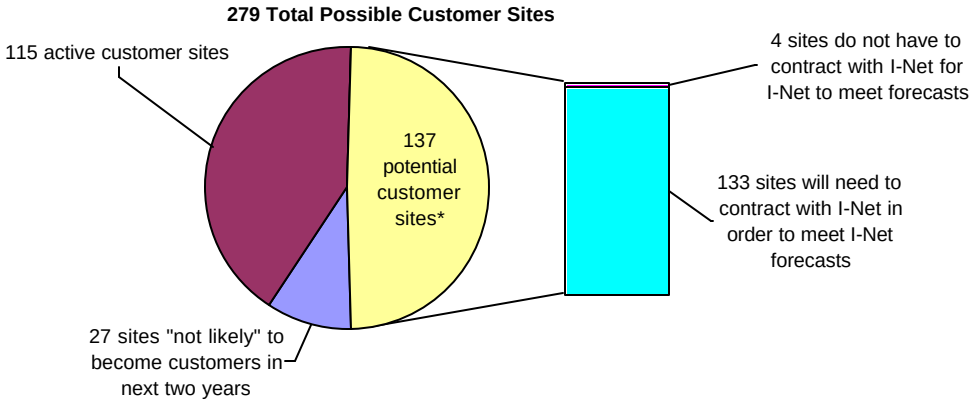
I-NET SURVEY FINDINGS

C7. PTI contacted 66 unsigned potential I-Net customers. 42 potential customers, representing 78 sites, responded to our survey and used a 1 to 7 scale to rate their likelihood of signing up for I-Net within the next two years – half of the respondents gave ratings of 3, 4, or 5 indicating a range of uncertainty around their likelihood of using I-Net services.

Ratings as a:	Not Likely (1 or 2)	Uncertain (3, 4, or 5)	Likely (6 or 7)
% of customers surveyed	33%	50%	17%
% of sites surveyed	35%	55%	10%
Number of sites surveyed	27	43	8

Virtually all potential sites considered "uncertain" or "likely" to sign up with I-Net will have to do so in order to meet I-Net's long-term goal of 248 sites. The following graphic depicts a breakdown of I-Net's 279 possible customer sites, using the market survey data to remove "not likely" sites from the potential customer pool.

Survey Results Market Breakdown



* Potential customer sites consist of sites that are "uncertain" or "likely" to sign up and all sites that were not surveyed.

Conclusions from the data above must be tempered by the fact that the survey only projected customers over the next two years.

C8. Potential customers often held preconceived notions that I-Net service offerings are expensive. Survey participants would sometimes comment that I-Net was too expensive for them, while admitting that they did not actually know I-Net's monthly price. When learning of the monthly price, some considered it less expensive than originally thought.

C9. The majority of I-Net's potential consumer market is still being serve d by commercial service providers. There was no significant change in the distribution of current service providers among potential customers since the 2001 survey. I-Net is continuing to compete against private sector companies for the lion's share of its market.

C10. Few schools expressed interest in I-Net services. Only two out of eleven school districts surveyed, rated themselves likely to sign up for I-Net. The less interested districts cited reasons similar to those brought up by the majority of respondents who are unlikely to sign up: I-Net was considered too expensive; it didn't meet their needs; or they were happy with their current services. However, it is also worth noting that Shoreline School District rated itself unlikely to sign up, yet has since contracted for I-Net services in third quarter of this year.

OPERATIONS

As I-Net completes its transition from a capital project to operations, focus is increasing on its operational performance. The following findings relate to current aspects of this area:

O1. I-Net is operating well and typically exceeds service level commitments. The network is successfully transitioning to operating status and current customers are satisfied.

O2. I-Net does not have a formal business plan that identifies I-Net's financial, operational, and marketing objectives and establishes how it will accomplish these objectives. While many documents on I-Net exist, none were cohesive – various reports contain bits and pieces of I-Net's plans. Together they present a disjointed picture and they often focus too heavily on past performance. Because I-Net competes in the private sector, the County needs a private sector-oriented business plan – one that addresses I-Net competitors with market planning and research, maintains a future focus, and emphasizes future financial results and efficient operations.

O3. The County is increasingly reliant on I-Net for WAN connectivity. Consistent with I-Net's forecast, the County's usage of I-Net circuits for its WAN is likely to go up and appears to be saving the County money. The County's internal dependence on this service would complicate any decisions to reduce or divest I-Net operations.

O4. I-Net is not reporting performance information to customers. Customers indicated that they would be interested in receiving reports on relevant I-Net performance measures such as technical metrics (e.g. system availability, bandwidth, and utilization, etc.). I-Net has not been providing this data to customers. Moreover, while I-Net commits to service levels, no reporting exists on service level compliance.

O5. Some customers have concerns about physical security of the I-Net. Customers noted that many network termination points are located in public buildings and expressed concern over the security of these locations.

O6. I-Net does not have an offering that meets the needs of smaller, less complex customers. I-Net's current products and services are not appealing to potential customers who have smaller budgets, and lower requirements for access and technology.

O7. I-Net has recently undergone organizational changes. I-Net has experienced changes in leadership over the past year. I-Net has hired a new network manager and a new operations manager, bringing relevant private sector experience to the team. Technical support for I-Net has also been merged into overall support for KC WAN, which has raised some concerns about accurate accounting for staff time.

FINANCE

I-Net's financial performance is particularly under scrutiny as it is a common belief among County stakeholders that I-Net should be self-sustaining. The findings below include those that are directly related to our financial analysis.

F1. To date, I-Net has had a positive cash flow. The recent I-Net quarterly report shows that it is currently self-sustaining – which is a favorable sign.

F2. No budget for research and development exists. I-Net has not set aside any funds for continued research and development of network technologies – a risky omission if they expect to remain competitive.

F3. I-Net will need a larger capital reserve to fund major technology upgrades. As network technologies continue to evolve and improve, I-Net needs to evaluate emerging technologies and may need the ability to change its network infrastructure in order to remain competitive with other network service providers. While replacement funds are being set aside, the levels are not likely to be adequate for a complete system replacement within a reasonable timeframe.

FINANCIAL ANALYSIS FINDINGS

F4. I-Net's existing financial forecast appears optimistic. Over the near term, the I-Net financial model seems relatively accurate – in the out years, projections appear optimistic as the model assumes 100% retention of I-Net customers, flat operating expenses, limited capital investment, and 87% penetration of the market. The model also predicts that telecommunications rates will increase, thereby increasing I-Net revenues – something that has not been born out over the last several years in the industry.

F5. I-Net may have difficulty maintaining financial self-sufficiency. Additional financial modeling indicates the I-Net will likely have difficulty meeting capital reserve requirements if it fails to meet customer projections, if unanticipated capital expenditures are required (e.g. major technology shift occurs), or if rates decrease. Reducing I-Net's projected market capture by 12% and using lower rate increases causes an apparent financial loss.

Appendix B contains three financial models, one based on ITS' projections and two that rely on less optimistic market penetration and rate assumptions.

POLICY

Many findings in this section stem from the lack of clearly defined and communicated public policy and business objectives for I-Net. Additionally, some leadership and political conflicts within the County appear to fuel obstacles to I-Net's success.

P1. ITS' credibility with Council has been significantly damaged over the course of I-Net's development. The Council has had unsatisfactory interactions with ITS regarding the I-Net since its inception. Requests for information have been a particular area of contention. As a result, the Council now frequently – and sometimes unnecessarily – questions ITS' motives and actions.

P2. Current, specific objectives for the I-Net have not been defined. Workshops, documentation review, and interviews with both Council and key I-Net staff members revealed that no recent objectives for the I-Net have been clearly documented and communicated. Interviewees and workshop participants primarily offered opinions and perceptions as to what the objectives might be.

P3. Public policy for I-Net is unclear. As with specific I-Net objectives, public policy around I-Net's mission has never been formally identified or established. In fact, individuals interviewed gave varying and sometimes conflicting opinions on the topic. Anecdotally, one of the primary Council objectives for I-Net included providing high speed access to the citizenry, but the County's franchise agreement with AT&T prohibits this form of use. Confusion appears over what this meant – some assume that providing access to citizenry means delivering direct broadband services to citizens, rather than indirectly through County agencies and I-Net customers.

P4. Other potential uses of I-Net are constrained by the franchise agreement. Under the franchise agreement, the County can support services from third parties (e.g. video conferencing), but it can neither sell these services nor can it provide any services to private entities.

P5. Council members and staff and County executive staff believe that I-Net should be self-sustaining. Most interviewees and workshop participants strongly feel that I-Net should operate like a private sector business and consequently be held to similar standards of financial performance – including self-sustaining profit and loss and the ability to renew infrastructure without additional external funding. Also, Council members and other senior leaders are concerned that I-Net development and operations are partially sustained through CX funds – something the merging of support staff may make harder to identify.

P6. Meeting some County objectives will require active management. Many individuals expressed a desire to utilize the I-Net as a tool for facilitating communications and data sharing between connected customers (e.g. schools and museums). Such objectives will need dedicated resources to make this happen, as well as formal management and planning on the part of ITS to be realized.

P7. King County I-Net is somewhat unique – most other I-Nets are not selling services to external customers. PTI researched other I-Nets in the U.S. and found that most jurisdictions in the nation only use I-Nets for internal communications. Working with AT&T and Comcast, our research did identify four somewhat similar networks. Of these four, none of the responding agencies have achieved full operational status and three are still subsidizing operations with general fund monies.

P8. The lack of an overall vision and strategic plan damages I-Net marketing efforts. The perceived lack of a common, unified, and positive vision of I-Net from top to bottom within the County causes concern among potential customers about the long-term viability of the service line.

P9. A relatively small (and shrinking) population paid for the build out and continuing debt service. I-Net development was significantly funded by 'Public, Educational, and Government' (PEG) fees paid by cable subscribers. The current ITS funding model assumes this funding source will continue to support I-Net operations – the franchise agreement with AT&T Comcast will be up for renewal in 2005 and could undergo regulatory changes that may affect the PEG fee revenues. Additionally, the number of cable subscribers is projected to decrease in the coming years, which would also impact PEG collections. These funds come only from subscribers in unincorporated areas of the County – a fact perceived as an unequal taxation by some.

RECOMMENDATIONS

For the County to begin addressing the issues highlighted by our findings, PTI recommends:

R1. Establishing a strategic plan for I-Net. I-Net's lack of formal strategy makes it difficult to develop a cohesive approach to I-Net marketing and operations. The strategic plan should include setting an overall vision and mission, defining clear operational and public policy objectives, and developing associated success measures. Forming definitive objectives needs to be I-Net's first priority; clear goals are absolutely critical for the County to be able to make decisions around I-Net's future and act on them. Depending on the ultimate objectives, I-Net may find it necessary to restructure its services and marketing approach.

R2. Focusing marketing efforts. I-Net needs to develop a detailed, tactical marketing plan that is aligned with the policy objectives that are being defined as part of the strategic planning effort. A comprehensive marketing strategy is important to achieving and maintaining a steady customer base and a positive, public image. The plan should include an approach for clearly communicating I-Net products and services and articulating I-Net's positive points of differentiation from the private sector to potential customers and internal audiences. The importance of marketing to I-Net's success also requires that I-Net have the expertise of a dedicated and skilled resource to execute the marketing plan – ensuring that new customers sign on and existing customers renew.

R3. Approaching management and operations as a private business would and adapting accordingly. I-Net is unlike other publicly offered/run services. As such, the County should recognize that there is risk inherent to investing in I-Net and consequently, some tolerance of risk is necessary. The County also needs to understand the limitations that may restrict what I-Net can do

as a "private sector-like" service in a public sector environment (e.g. franchise agreement restrictions).

Nevertheless, it follows that operating I-Net requires a different approach than is generally used to run public sector services that are not self-sustaining and/or have little competition for their customers. As I-Net competes with the private sector and is expected to be self-sustaining, it needs to operate more like a private sector business in order to survive and be competitive in the marketplace. The approach calls for I-Net to:

- *Budget/invest appropriately into research and development.* This will allow I-Net to make informed decisions around changing or upgrading its network as the technology in this industry continues to advance rapidly.
- *Perform market research and assess customer needs and competitor offerings as a regular business practice.* This effort will determine I-Net's ability to remain aware of changing customer needs and its competitors' strategies and to offer a compelling, competitively priced, service to the market.
- *Use a less optimistic forecasting model.* This approach prepares I-Net for more realistic outcomes (i.e. less positive outcomes) for its operations and encourages the consideration of strategies to address potential shortfalls or market shifts.
- *Sustain operations with sufficient revenue to achieve a yearly net gain in capital reserves.* To compete successfully against the private sector business model, I-Net will have to make management decisions based on the same operating fundamentals of attaining enough positive cash flow to support itself and build the capital reserve necessary to maintain and/or upgrade their network.

If I-Net can adopt these business practices, it can better evolve its services, set and manage internal financial and operational expectations, and address the pressures of private sector competition.

R4. Closely monitor financial performance – and be prepared to reduce operating costs if necessary. Given that little room exists for revenue expansion past I-Net's potential market, I-Net needs to assess financial progress vigilantly and identify expenditures that could be cut if performance falls below target financial ranges. I-Net should develop and maintain a forward-looking operating model that uses actual customer, revenue, and expense data as a basis for projecting future results.

CHAPTER 3

performance measures

King County Auditor's Office
I-Net Performance Measures
September 26, 2002

The primary component of PTI's work for the Auditor's Office focused on the development of performance measures for the I-Net that would enable the County to monitor the service's operational and financial performance. This chapter brings together the results of a collaborative effort with the County task force to identify realistic performance measures and establish a plan for their collection and reporting.

The chapter is organized in the following sections:

- **Process and Definitions** describes our approach to developing metrics and defines the terms used to communicate them
- **Business Objectives** presents the County goals for I-Net
- **Performance Measures, Benchmarks, and Data Collection** explains the performance measures and their associated benchmarks in detail – it also outlines the plan for data gathering and/or calculations

PROCESS AND DEFINITIONS

PTI began the project by reviewing existing documentation to gain a better understanding of County goals, policies, financial information and previous studies related to the I-Net project. From that point, we worked with the Auditor's Office to establish a project task force. We framed a charter, identified task force members, and conducted a kick-off meeting to review project objectives and approach, clarify roles and responsibilities, and handle project logistics. The task force consisted of representatives from various I-Net stakeholders, including Council staff, ITS, and the King County Libraries. Please see Appendix E for the task force charter and membership.

The task force served as an integral project partner, working with PTI throughout the engagement in a series of workshops to brainstorm, review, and validate business objectives, performance measures, benchmarks, the data collection plan, and report formats/components.

We also conducted interviews with County staff and external I-Net stakeholders. These interviews provided first-hand input on potential performance metrics and benchmarks, market opportunities and challenges, and future service offerings.

In developing the I-Net performance measures, we use the following terms and definitions:

- **Categories of performance measures** represent broad areas of metrics (e.g. technical performance, financial performance, etc.)
- **Performance measures** are the specific metrics (e.g. reliability, revenue, etc.)
- **Benchmarks** are the target values or baselines of these metrics, when appropriate

BUSINESS OBJECTIVES

Agreed-upon business objectives for I-Net have not been formally documented at the County. As a result, PTI worked with the task force to come up with business objectives that could provide direction for the performance measures. Correspondingly, the measures are intended to help quantitatively assess I-Net's achievement of its business objectives.

The I-Net **business objectives** share the following characteristics – they:

- Define an expected result
- Align with County goals and policies
- Can be assessed through one or more performance measures

The following lists the County's goals for I-Net, as identified by the project task force:

- **Financially self-sufficient** – I-Net should be able to pay for itself, including required future capital investments
- **Meets customer market penetration goals** – I-Net should be able to win contracts as forecasted in the I-Net business model
- **County facilitates and promotes use and interagency sharing** – With County leadership, I-Net should serve as a mechanism for sharing data and applications between I-Net customers and increase cooperation and communications among them
- **Provides a backbone for convergence of voice, video, and data** – I-Net technology should support current and future customer needs for network services
- **Meets service level and quality of service obligations** – Each I-Net customer contract includes a service level agreement, guaranteeing customer service and technology performance levels; I-Net should meet these contractual agreements
- **Serves public institutions in areas with otherwise poor access** – As a public sector service offering, I-Net should bring access to public institutions that are currently underserved and have limited network options
- **Reduces internal County 'communications' costs** – The use of I-Net at the County for services such as WAN connectivity should provide cost avoidance savings on telecommunications to the County
- **Remains competitive with the private sector** – Since I-Net competes with the private sector for its customers, adapting its operations accordingly to provide services at competitive costs is critical to remaining in business
- **Retains customers and achieves targeted customer satisfaction levels** – In order to meet financial requirements and provide quality service to its customers, I-Net should ensure that it is consistently meeting customer needs (in terms of cost and services), thereby improving the chances of customer retention

PERFORMANCE MEASURES, BENCHMARKS, AND DATA COLLECTION

Using the business objectives defined above as a starting point, we defined performance measures for the I-Net. They fall into four, broad categories:

- **Financial Performance** covers elements of the I-Net business plan and financial model as well as internal County cost savings
- **Technical Performance** captures measures related to capacity
- **Customer Satisfaction** includes all items of the I-Net service level agreements and performance on an annual customer survey
- **Market Performance** has measures related to market penetration, marketing activities, mix of services, and competition

Overall, PTI developed a large set of metrics. Over time, I-Net should reduce this set and/or refine the measures as actual data is captured and evaluated. The tables in the following pages present the recommended metrics. Each table of metrics contains columns that outline associated benchmarks and the data collection approach. Columns consist of:

- **Metric** – names the metric and provides explanation when the definition is not self-evident
- **Benchmark** – indicates the target value of the performance measure, where applicable – in many instances, capturing data to monitor the direction of the metrics is more relevant than identifying a specific number and so "Trend" is used to denote these instances)

- **Data Elements and Sources** – describes the source for obtaining the required data to calculate the metric
- **Frequency of Data Collection** – suggests the frequency at which the data should be captured (not when it should be reported)
- **Process/Analysis** – details the process or calculation that can be used to determine the value of the metric
- **Party Responsible for Obtaining and Analyzing** – identifies the most likely party for gathering the data and performing the analysis

FINANCIAL PERFORMANCE

FINANCIAL PLAN ELEMENTS*

These metrics track critical monetary measures identified in the I-Net business plan.

Metric	Benchmark	Data Elements and Sources	Frequency of Data Collection	Processing / Analysis	Party Responsible for Obtaining & Analyzing	Party Responsible for Analysis
Fund balance (Assumes complete equipment replacement every 5 years, 3 moves/year @ X amount)	= Required Equipment Replacement Reserves	Operating fund actuals	Quarterly	Equipment Replacement Reserves = ((Complete Equipment Reserve Replacement Cost ÷ 5)+ (3 × Move Cost))	I-Net	I-Net
Revenue distribution between KC vs. external sources	Trend	Operating fund actuals	Quarterly	Percentages of: Earned KC Revenue, Earned External Revenue, Earned Other Revenue	I-Net	I-Net
Capital reserve	Trend	Fund balance	Annual	none	I-Net	I-Net
Capital expenditure	Trend	Equipment Purchase/ Replacement	Quarterly	none	I-Net	I-Net
Operating costs per site[1]	Trend	Operating fund actuals	Quarterly	Total Operating Expenditure ÷ Number of Active Sites	I-Net	I-Net
Earned revenue per site[2]	Trend	Operating fund actuals	Quarterly	Total Operating Revenue ÷ Number of Active Sites	I-Net	I-Net
Actual vs. projected revenue	Trend	Operating fund actuals and I-Net business plan	Quarterly	none	I-Net	I-Net
Actual vs. projected operating costs	Trend	Operating fund actuals and I-Net business plan	Quarterly	none	I-Net	I-Net

* I-Net needs to carefully define all financial elements such as operating revenue and operating expenditures, and keep these definitions unchanged to ensure that the financial plan remains valid from quarter to quarter.

[1] Operating expenditures would include direct operating expenses and possibly the required capital reserve contribution

[2] Operating revenue would likely exclude PEG revenues and earned interest

COST AVOIDANCE SAVINGS

These metrics capture the quantifiable savings from the use of more economical communications methods, measured by reduced internal telecom and data communication costs at the County. For the purposes of capturing this metric reasonably and realistically, cost avoidance applies only to internal County customers and only when an existing circuit is replaced and the old line is retired.

Metric	Benchmark	Data Elements and Sources	Frequency of Data Collection	Processing / Analysis	Party Responsible for Obtaining & Analyzing	Party Responsible for Analysis
Rate differential - monitors annual financial savings from using I-Net instead of other services, based on the competitive monthly rates at contract signing. Assumes annual savings are captured in current quarter.	Trend	Former KC WAN contracts	Quarterly	Annual Rate Differential = 12 × (Total Monthly Cost of Retired Circuits - (Number of Retired Circuits × Monthly Cost of 5-Year Full Service I-Net Contract))	I-Net	I-Net
$/Mbps differential - monitors annual $/Mbps savings from using I-Net instead of other services, based on competitive monthly rates and bandwidth offerings at contract signing. Assumes annual savings are captured in current quarter.	Trend	Former KC WAN contracts	Quarterly	Annual $/Mbps Differential = 12 × ((Total Monthly $/Mbps of Retired Circuits ÷ Total Number of Retired Circuits) - I-Net Monthly $/Mbps)	I-Net	I-Net
Number of new I-Net circuits - identifes the volume of old circuits that have been replaced by new I-Net circuits as a way to gauge I-Net growth	Trend	I-Net Contracts	Quarterly	none	I-Net	I-Net

TECHNICAL PERFORMANCE

CAPACITY

These metrics monitor the utilization of the current ATM network and assist in network planning. Additional technical metrics are tracked as part of I-Net's service level agreements and are listed in the Customer Satisfaction category.

Metric	Benchmark	Data Elements and Sources	Frequency of Data Collection	Processing / Analysis	Party Responsible for Obtaining & Analyzing	Party Responsible for Analysis
Actual bandwidth saturation - monitors amount of time per day that the network is running at peak utilization	Trend	Network monitoring service	Quarterly	Total Minutes of Saturation per Business Day Averaged Over the Quarter	I-Net	I-Net
Actual bandwidth utilization - monitors per ring utilization	Trend	Network monitoring service	Quarterly	Network Utilization Per Ring	I-Net	I-Net
Committed utilization - monitors total utilization per ring based on total capacity that is contractually guaranteed to the customer	Trend	Number of I-Net's sites / ring	Quarterly	Number of Customer Sites × 6 Mbps per Ring	I-Net	I-Net
Planned committed utilization - monitors total utilization per ring based on total capacity that is contractually guaranteed to existing and forecasted customers	As planned by I-Net	Number of I-Net's forecasted sites / ring	Quarterly	2 Year Forecast Graph of Committed Utilization of Customer Sites per Ring	I-Net	I-Net

CUSTOMER SATISFACTION

SERVICE LEVEL AGREEMENTS (SLAS)

These metrics are the contractual levels of service that I-Net must meet.

Metric	Benchmark	Data Elements and Sources	Frequency of Data Collection	Processing / Analysis	Party Responsible for Obtaining & Analyzing	Party Responsible for Analysis
Network latency - reflects how efficiently the network transmits data	< 3 milliseconds	Network monitoring service	When exceptions occur	Self-monitor number of exceptions	I-Net	I-Net
System availability - measures amount of time that the network is up and operating satisfactorily	99.9%	Network monitoring service	When exceptions occur	Self-monitor number of exceptions	I-Net	I-Net
Maintenance window - monitors adherence to scheduled hours for maintenance and advance notice for other outages	72 hour notice on scheduled outages, scheduled maintenance between 6-9am Sundays	Self-report	When exceptions occur	Self-monitor number of exceptions	I-Net	I-Net
Reliability - measures how quickly the network recovers from failures	network recovery < 3 seconds, detection & re-routing in approximately 1 second	Network monitoring service	When exceptions occur	Self-monitor number of exceptions	I-Net	I-Net
Problem reporting and escalation procedures - monitors response time to trouble reports	customer receives initial status callback within 30 min of initial trouble report	Self-report, work/service order management system	When exceptions occur	Self-monitor number of exceptions	I-Net	I-Net
Problem escalation - monitors resolution time to trouble reports	problem resolution target is within 2 hours of problem report	Self-report, work/service order management system	When exceptions occur	Self-monitor number of exceptions	I-Net	I-Net
New service - monitors the time required to fulfill requests for new service	within 60 days of receipt of written request	Self-report, work/service order management system	When exceptions occur	Self-monitor number of exceptions	I-Net	I-Net
Circuit changes - monitors the time required to fulfill requests for circuit changes	within 10 days of receipt of approved request	Self-report, work/service order management system	When exceptions occur	Self-monitor number of exceptions	I-Net	I-Net

CUSTOMER SATISFACTION LEVELS AND NUMBER OF APPLICATIONS

ITS must develop and deploy an annual customer survey to gauge customer (e.g. network managers, etc.) satisfaction with, and use of, I-Net services. The survey will also be used to capture the number of applications to assist in assessing customer uses of I-Net. The survey can administer questions such as:

- "Where have you used the I-Net to enhance overall interagency communications?"
- "Have you used the I-Net in the last 12 months to provide services to external parties including audio, streaming video, etc.? Please list."

Metric	Benchmark	Data Elements and Sources	Frequency of Data Collection	Processing / Analysis	Party Responsible for Obtaining & Analyzing	Party Responsible for Analysis
Survey results	Trend	Annual survey	Annual	Average survey responses	I-Net	I-Net
Number of applications	n/a	Annual survey	Annual	Use annual customer satisfaction survey to gather data	I-Net	I-Net

MARKET PERFORMANCE

MARKETING PLAN PERFORMANCE

These metrics monitor the execution marketing efforts that are outlined in an annually updated marketing plan.

Metric	Benchmark	Data Elements and Sources	Frequency of Data Collection	Processing / Analysis	Party Responsible for Obtaining & Analyzing	Party Responsible for Analysis
Number of customer contacts per quarter	Based on marketing plan	Customer service engineer	Quarterly	none	Customer service engineer's manager	Customer service engineer's manager
Number of mailings per quarter	Based on marketing plan	Customer service engineer	Quarterly	none	Customer service engineer's manager	Customer service engineer's manager
Number of community interest meetings per quarter	Based on marketing plan	Customer service engineer	Quarterly	none	Customer service engineer's manager	Customer service engineer's manager
Number of on-site visits per quarter	Based on marketing plan	Customer service engineer	Quarterly	none	Customer service engineer's manager	Customer service engineer's manager

MIX OF SOLD SERVICES

These metrics track the sales of different I-Net services and provide views into the sales pipeline.

Metric	Benchmark	Data Elements and Sources	Frequency of Data Collection	Processing / Analysis	Party Responsible for Obtaining & Analyzing	Party Responsible for Analysis
Percentage of dark fiber sites vs. full service sites - monitors relative sales of different I-Net services. Adjusted to include new services as necessary.	Trend	I-Net business plan	Quarterly	Percentage of Dark Fiber Sites calculated as: # Dark Fiber Sites ÷ Total # Sites, Percentage of Full Service Sites calculated as: # Full Service Sites ÷ Total #Sites	I-Net	I-Net
Future months booked under contract - monitors the total number of months that remain on existing contracts	Trend	Contracts	Quarterly	Total number of months remaining on existing contracts	I-Net	I-Net
Future months projected under contract - monitors the total number of months expected from prospective contracts	Trend	I-Net business plan	Quarterly	Total number of months on projected contracts	I-Net	I-Net

MARKET PENETRATION

These metrics assess the acquisition and retention of customers in the potential market.

Metric	Benchmark	Data Elements and Sources	Frequency of Data Collection	Processing / Analysis	Party Responsible for Obtaining & Analyzing	Party Responsible for Analysis
Percentage of actual customers to total possible customers	As currently forecast in I-Net financial plan	Contracts	Quarterly	Percentage of actual customers calculated as: # Actual Customers ÷ # Total Possible Customers	I-Net	I-Net
Percentage of active sites to total possible sites	As currently forecast in I-Net financial plan	Contracts	Quarterly	Percentage of active sites calculated as: # Active Sites ÷ # Total Possible Sites	I-Net	I-Net
Percentage of expired contracts that are renewed	100%	Customer service engineer	Quarterly	Percentage of expired contracts that are renewed calculated as: # Expired Contracts Renewed ÷ # Expired Contracts	Customer service engineer's manager	Customer service engineer's manager

RATE/SERVICE BUNDLE

These metrics provide possible ways of comparing I-Net to private sector competitors. Unfortunately, market conditions prevent the development of a definitive data collection and analysis method. The market for these services changes rapidly and the rates and service bundles, including I-Net's rates, will adjust accordingly. As rates are collected for comparison purposes, the data will need to be normalized to I-Net's rate and service offerings. The table below provides a framework for future analysis; additional details will need to be worked out to complete the comparison.

Metric	Benchmark	Data Elements and Sources	Frequency of Data Collection	Processing / Analysis	Party Responsible for Obtaining & Analyzing	Party Responsible for Analysis
Flat/direct service rate comparison	TBD or trend	Competitor rates	Annually	I-Net Rate vs. (Competing WAN Rate + Competing Internet Rate)	Consultant	Consultant
$/Mbps service rate comparison	TBD or trend	Competitor rates	Annually	I-Net $/Mbps vs. (Competing WAN $/Mbps + Competing Internet $/Mbps)	Consultant	Consultant

CHAPTER 4

sample performance measures report

King County Auditor's Office
I-Net Performance Measures
September 26, 2002

SAMPLE PERFORMANCE MEASURES REPORT

This chapter outlines the measures and benchmarks recommended for inclusion in I-Net's quarterly reports and provides sample presentations for each of the measures. Note that **FICTITIOUS DATA IS USED** as we only intend to provide the reader with a general idea of how benchmarks can be illustrated. Appendix F contains actual performance metric data provided by ITS as of this report's publication date.

The report components, beginning on the next page, are organized as follows:

- **Executive Summary** lists key areas that an executive summary should include
- **Performance Measure Dashboards** illustrate how the metrics can be rolled up and communicated in a dashboard format for an "at-a-glance" view of how I-Net is doing in the major areas of financial performance, marketing performance, etc.
- **Performance Measures by Category** describes key metrics and presents them with sample charts to suggest how the data could be graphed
- **Appendices** include the remaining financial and market metrics that may provide less critical information for the current quarter, along with I-Net marketing and financial plans

All data presented on these pages is fictitious and for illustration purposes only

EXECUTIVE SUMMARY

The Executive Summary will cover the following:

- I-Net project summary
- Notable performance measures
- Significant changes since last report, including revisions to projected financial results, customers gained or lost, etc.

PERFORMANCE MEASURE DASHBOARDS

The major performance measures are monitored against projections and could be rolled up and summarized by the dashboards below to provide a brief, high level view of I-Net's progress.

FINANCIAL PERFORMANCE TO PLANNED

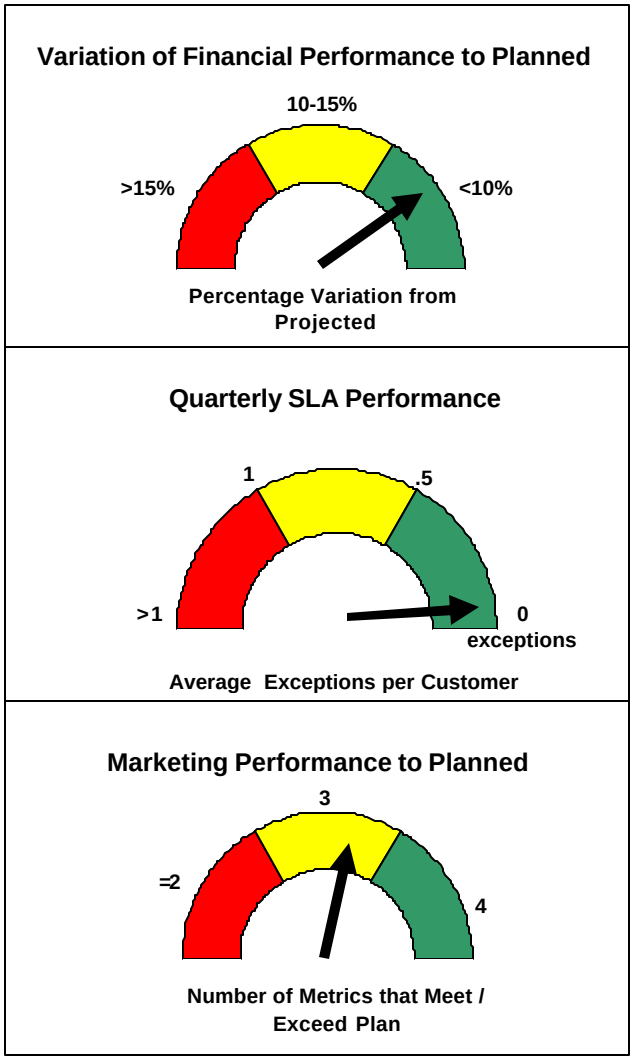
This dashboard presents the average variation of I-Net's actual financial performance from its' planned performance. The metrics considered in this average would include: annual operations excess/deficit, earned revenue, operating costs, equipment replacement reserves, and equipment purchase/replacement expenditures. The "Financial Performance" section and sample Appendix A present these metrics in further detail.

SLA PERFORMANCE

This dashboard illustrates the average number of SLA exceptions per customer over all I-Net SLAs. SLAs include primary technical metrics such as network latency, system availability, reliability, and customer service commitments around problem reports, etc. The "Customer Satisfaction" section of the report would provide additional detail on SLAs.

MARKET PERFORMANCE TO PLANNED

This dashboard displays I-Net's performance in relation to four key metrics in the marketing plan. The "Market Performance" section of the report would have additional detail.



Note: Dashboard contents may need adjustment if they do not appear to accurately depict I-Net's performance.

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I-NET PERFORMANCE MEASURES

Chapter Four: Sample Performance Measures Report

PERFORMANCE MEASURES BY CATEGORY

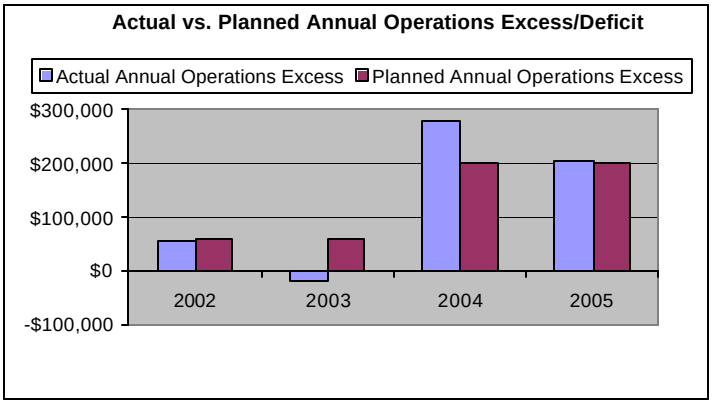
Key metrics and benchmarks are listed by category below. The metrics and associated graphs presented in the body of each quarterly report may ultimately vary, depending on the measures that need to be highlighted for that particular reporting period. The remaining metrics would be provided in the appendices. Most graphs in the body of the report and the appendices would display historical data as well.

A. FINANCIAL PERFORMANCE

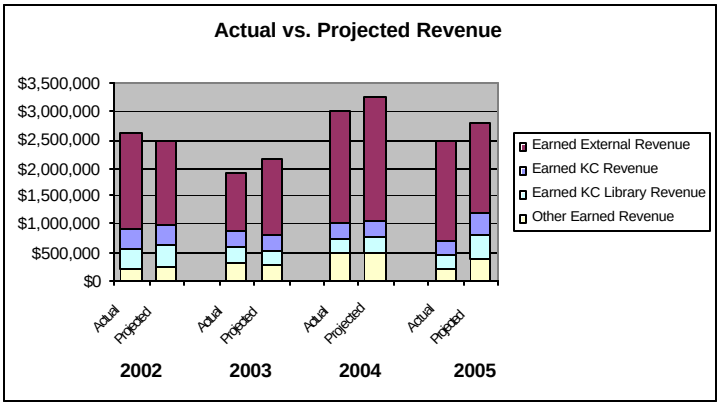
FINANCIAL PLAN ELEMENTS

These sample metrics evaluate I-Net's performance to its financial plan. In this report example, Appendix A lists additional metrics that assist in the management of operations and address cost avoidance savings. Appendix B provides next quarter's financial plan.

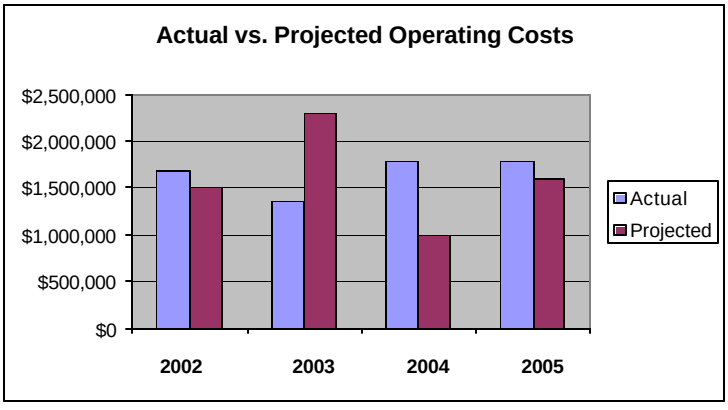
1. Actual Annual Operations Excess/Deficit – monitors ability to meet planned annual contribution to equipment replacement reserves.



2. Actual Revenue vs. Projected Earned Revenue – monitors performance against I-Net financial plan. Identifies sources and distribution of earned revenue.



3. Actual vs. Projected Operating Costs - monitors operating cost against I-Net financial plan.



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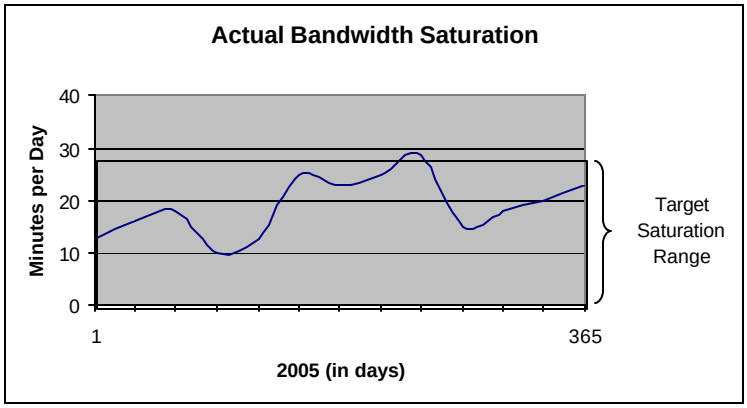
Chapter Four: Sample Performance Measures Report

B. TECHNICAL PERFORMANCE

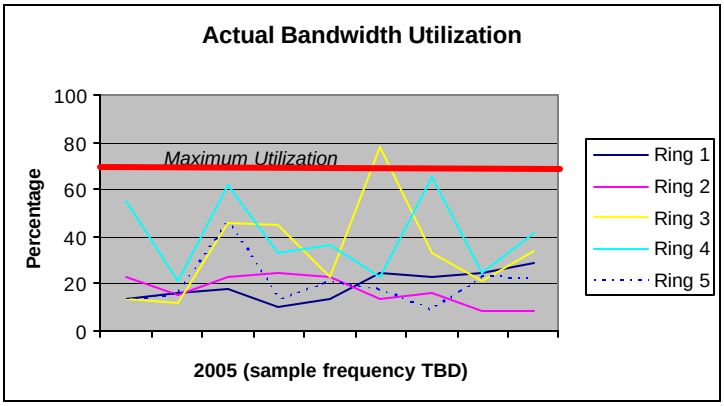
CAPACITY

The following metrics monitor the utilization of the current network.

1. Actual Bandwidth Saturation – monitors amount of time per day that the network is running at peak utilization.

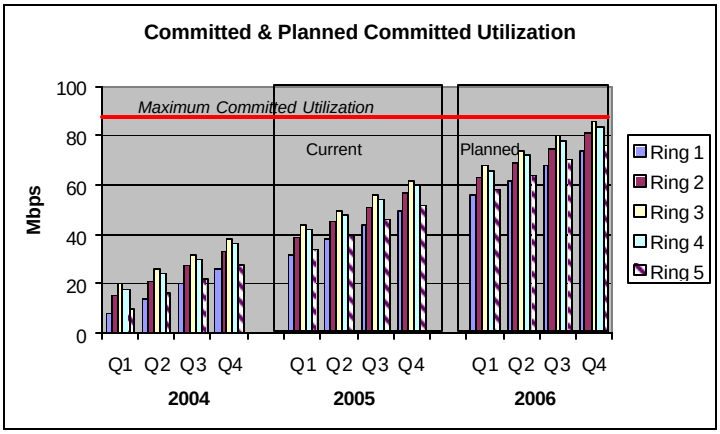


2. Actual Bandwidth Utilization - monitors per ring utilization compared to design targets.



3. Committed Utilization – the "current year" group in the chart to the right monitors total committed utilization per ring compared to design targets.

4. Planned Committed Utilization – the "planned" group in the chart monitors total forecasted committed utilization per ring compared to design targets.



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I-NET PERFORMANCE MEASURES

Chapter Four: Sample Performance Measures Report

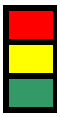
C. CUSTOMER SATISFACTION MEASURES

SLAS

The contractual standard levels of service that I-Net must meet would be monitored via exceptions for each SLA as shown below.

The average number of exceptions per customer/site is denoted by the "stoplight" metaphor where the color red indicates cause for concern, etc.:

> 1 exception per customer/site
1 exception per customer/site
No exceptions per customer/site



1. **Network Latency** - reflects how efficiently the network transmits data

2. **System Availability** - measures amount of time that the network is up and operating satisfactorily

3. **Maintenance Window** - monitors adherence to scheduled hours for maintenance and advance notice for other outages

4. **Reliability** - measures how quickly the network recovers from failures

5. **Problem Reporting and Escalation Procedures** - monitors response time to trouble reports

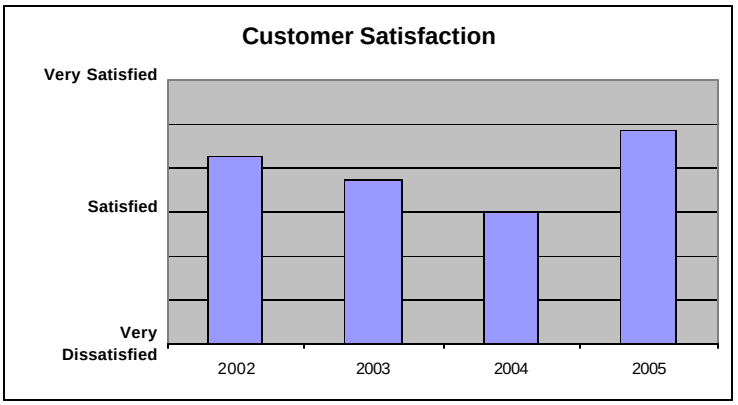
6. **Problem Escalation** - monitors resolution time to trouble reports

7. **New Service** - monitors the time required to fulfill requests for new service

8. **Circuit Changes** - monitors the time required to fulfill requests for circuit changes

CUSTOMER SATISFACTION LEVELS

1. Customer Satisfaction Survey Results – annually tracks the average level of customer satisfaction.



NUMBER OF APPLICATIONS

2. Number of Applications - captured via a section in the annual customer satisfaction survey. Free-form response question intended to gather information about how I-Net customers are using the system.

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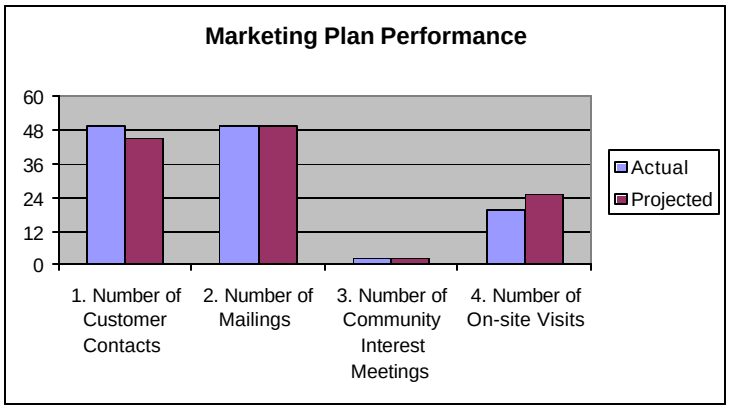
I-NET PERFORMANCE MEASURES

Chapter Four: Sample Performance Measures Report

D. MARKET PERFORMANCE

MARKETING PLAN PERFORMANCE

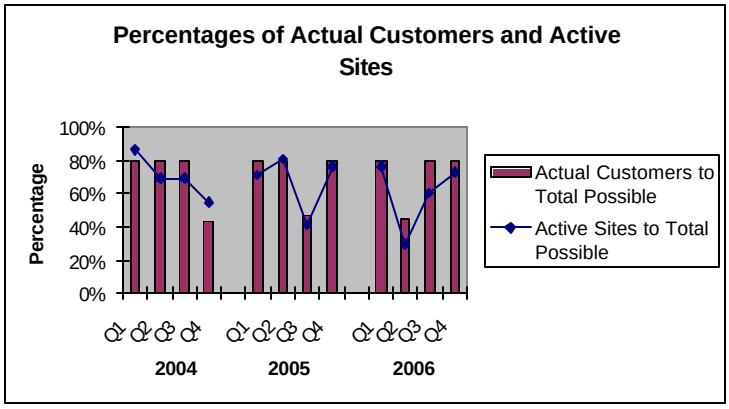
1. Marketing Plan Measures – Four key metrics in the sample chart below measure I-Net marketing efforts. The appendices would contain a summary of next quarter's marketing plan.



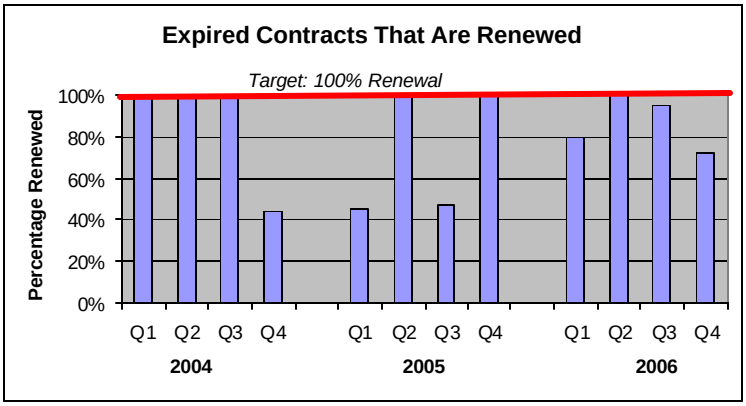
MARKET PENETRATION

These metrics would assess acquisition and retention of customers in the potential market.

2. Percentage of Actual Customers – bar graph in the chart presents the actual number of I-Net customers as a percentage of total possible customers.



3. Percentages of Active Sites to Total Possible Sites – line graph in the chart presents the actual number of active sites as a percentage of total possible sites.



4. Expired Contracts That Are Renewed – monitors the percentage of renewing I-Net customers.

All data presented on these pages is fictitious and for illustration purposes only

RATE/SERVICE BUNDLE

5. Flat/Direct Service Rate Comparison and $/Mbps Service Rate Comparison - market conditions prevent the development of a definitive data collection and analysis method. The market for these services changes rapidly and the rates and service bundles, including I-Net's rates, will adjust accordingly. As rates are collected for comparison purposes, the data would need to be normalized to I-Net's rate and service offerings.

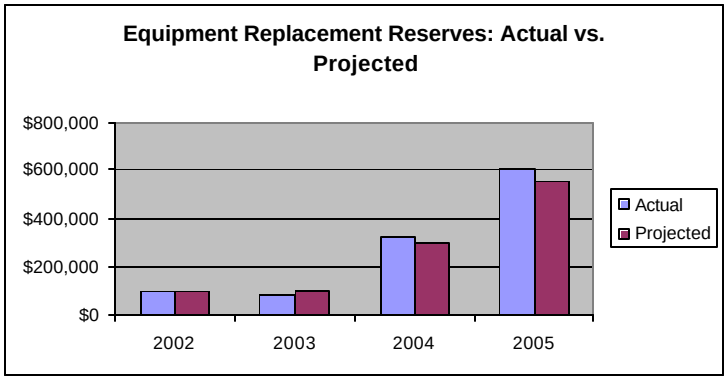
APPENDICES

Report appendices would present the remaining metrics, illustrated in a similar fashion to the previous measures as shown below. The appendices would also include the following quarter's financial and marketing plan.

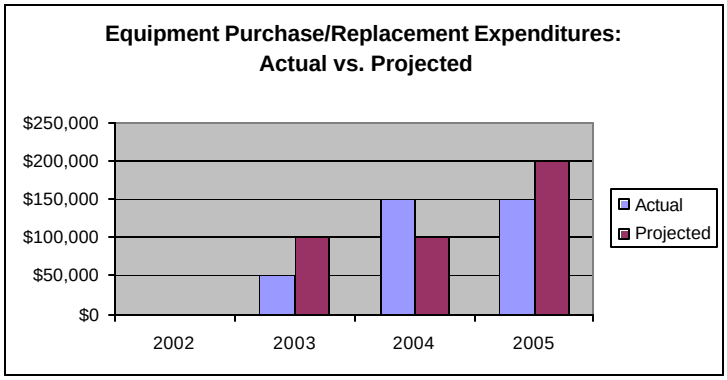
A. ADDITIONAL FINANCIAL METRICS AND BENCHMARKS

PERFORMANCE TO PLANNED

1. Equipment Replacement Reserves – monitors Equipment Replacement Reserves against financial plan projections.

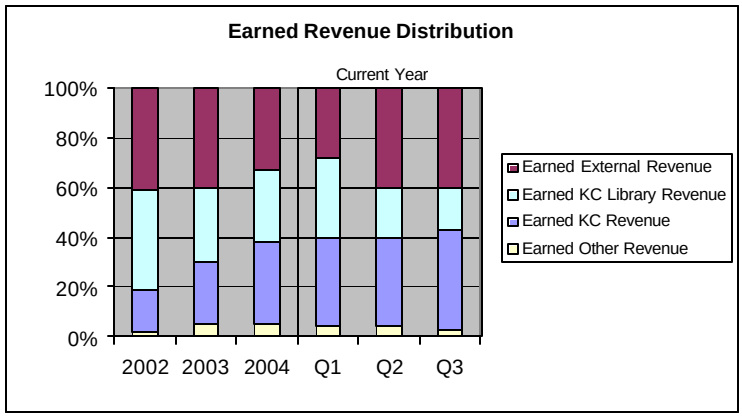


2. Equipment Purchase/Replacement Expenditures - monitors Equipment Replacement Expenditures against financial plan projections.



MANAGEMENT OF OPERATIONS

3. Earned Revenue Distribution - monitors I-Net earned revenue distribution, where Earned External Revenue is used to distinguish between revenue from King County agencies and other customer organizations.



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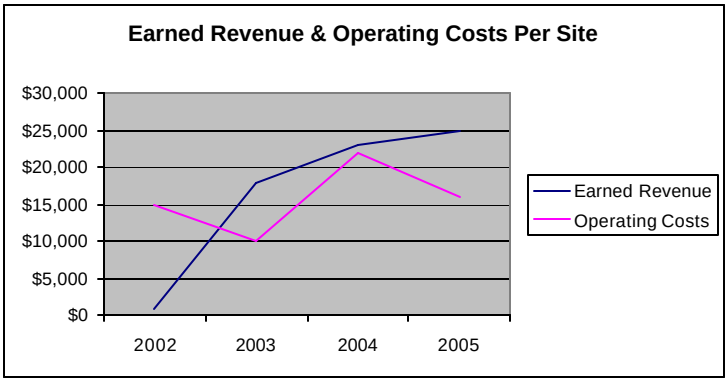
I-NET PERFORMANCE MEASURES

Chapter Four: Sample Performance Measures Report

4. Earned Revenue and Operating Costs per Site – monitor trends of and relationships between earned revenue and operating costs per site.

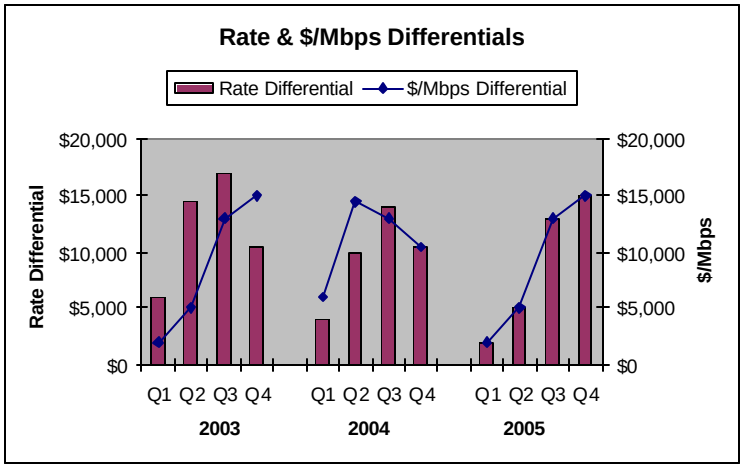


COST AVOIDANCE SAVINGS

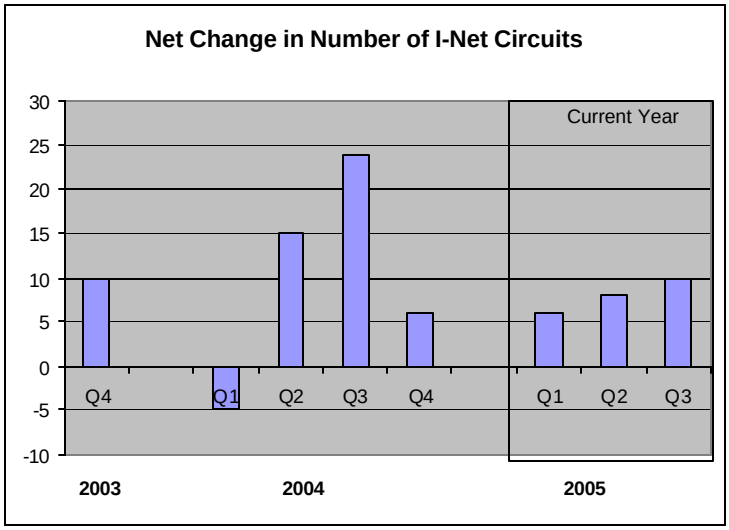
The following metrics provide possible methods of capturing savings resulting from reduced telecom and data communication costs to the County.

5. Rate Differential – bar graph shows total one-time annual savings to the County resulting from the monthly rate difference in services initiated in the specified quarter.

6. $/Mbps Differential - line graph shows total one-time annual savings to the County resulting from the monthly $/Mbps difference in services initiated in the specified quarter.



7. Net Change in Number of I-Net Circuits – provides view of change in number of active I-Net circuits within the County over eight quarters.



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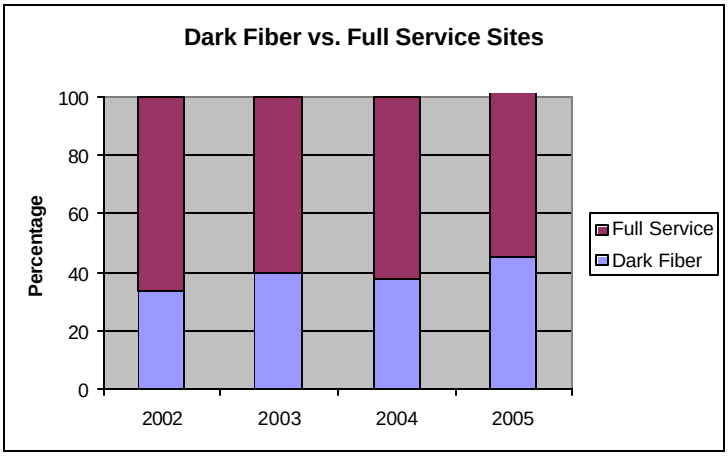
Chapter Four: Sample Performance Measures Report

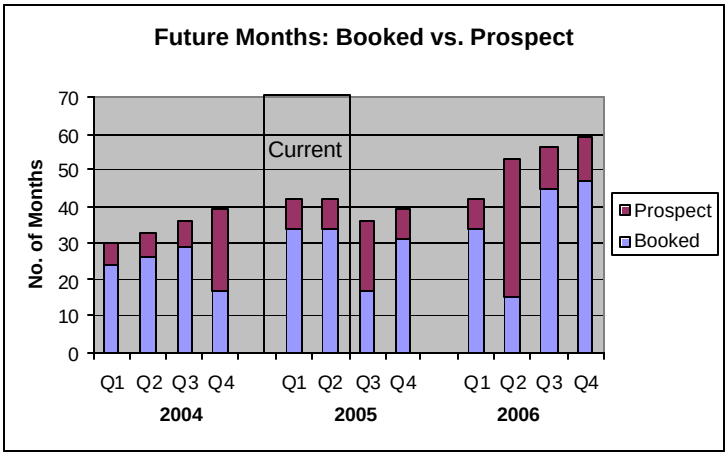
B. ADDITIONAL MARKET METRICS AND BENCHMARKS

MIX OF SOLD SERVICES

1. Dark Fiber vs. Full Service Sites – monitors percentage sales of different I-Net services, adjusted to include additional service offerings as necessary.



2. Future Revenue Months: Booked vs. Prospect – provides breakdown of projected future months of revenue, showing both months under contract and prospects.



C. QUARTERLY FINANCIAL PLAN

Next quarter's financial plan.

D. QUARTERLY MARKETING PLAN

Next quarter's marketing plan.

APPENDIX A

market survey and detailed results

King County Auditor's Office
I-Net Performance Measures
September 26, 2002

APPENDIX A: MARKET SURVEY AND DETAILED RESULTS

PTI updated the County's market evaluation, first conducted in August of 2001. We conducted the survey by telephone, contacting the same individuals that participated in the first survey, if possible. We made up to three attempts to reach each participant between May and June of 2002. Each interview lasted from 20 to 30 minutes. 42 of the 66 potential I-Net customers responded – due to the nature of the survey, we did not contact existing customers. To best serve the needs of the County, we employed a subset of the first survey's questions, focusing on those that seemed to provide the most specific information regarding how the I-Net's market base might have changed since the original survey.

This appendix provides the data from the recent survey, alongside the data from the previous survey, to illustrate the findings. The presentation format follows the previous survey's format as closely as possible to facilitate comparison of the results.

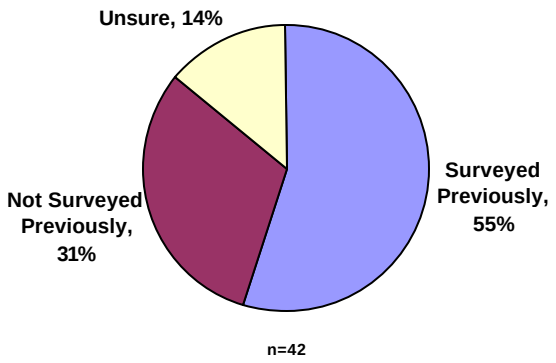
Please note that the results have not been analyzed for statistical validity. Readers should bear this in mind when interpreting the data.

RESULTS

DEMOGRAPHICS

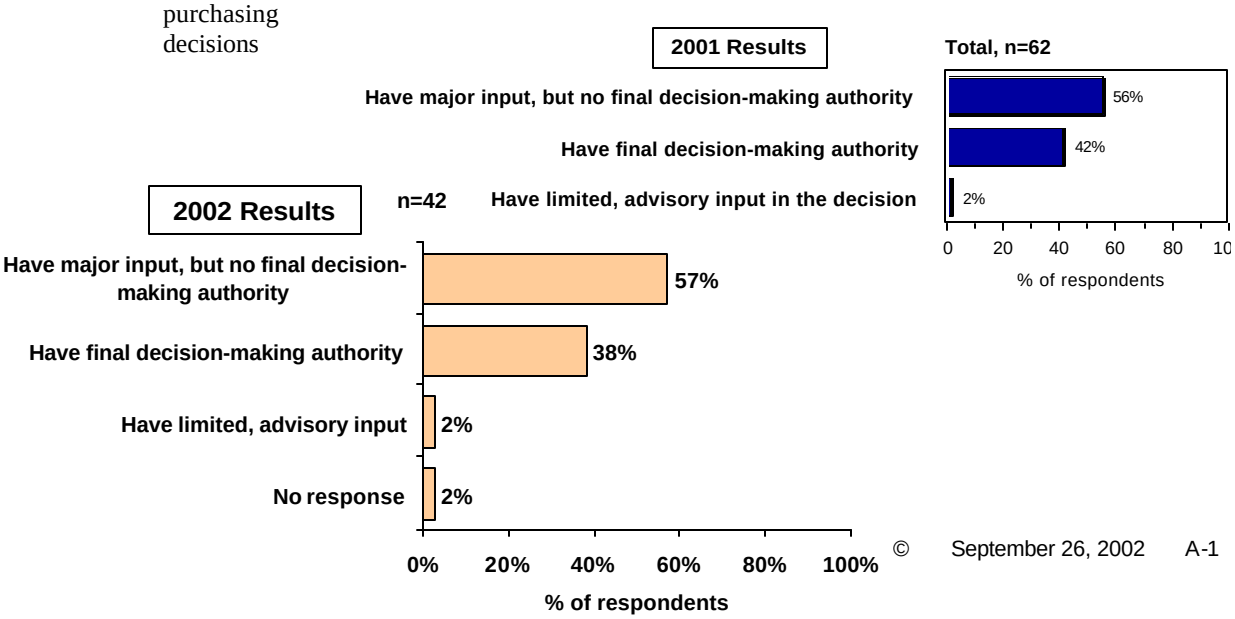
WERE YOU POLLED PREVIOUSLY?

- We asked the responding party whether they took part in the survey last year
- Most had taken the survey last year also



QUESTION 19: WHAT IS YOUR ROLE IN THE DECISION-MAKING PROCESS FOR PURCHASING NETWORK SERVICES WITHIN YOUR AGENCY? DO YOU …?

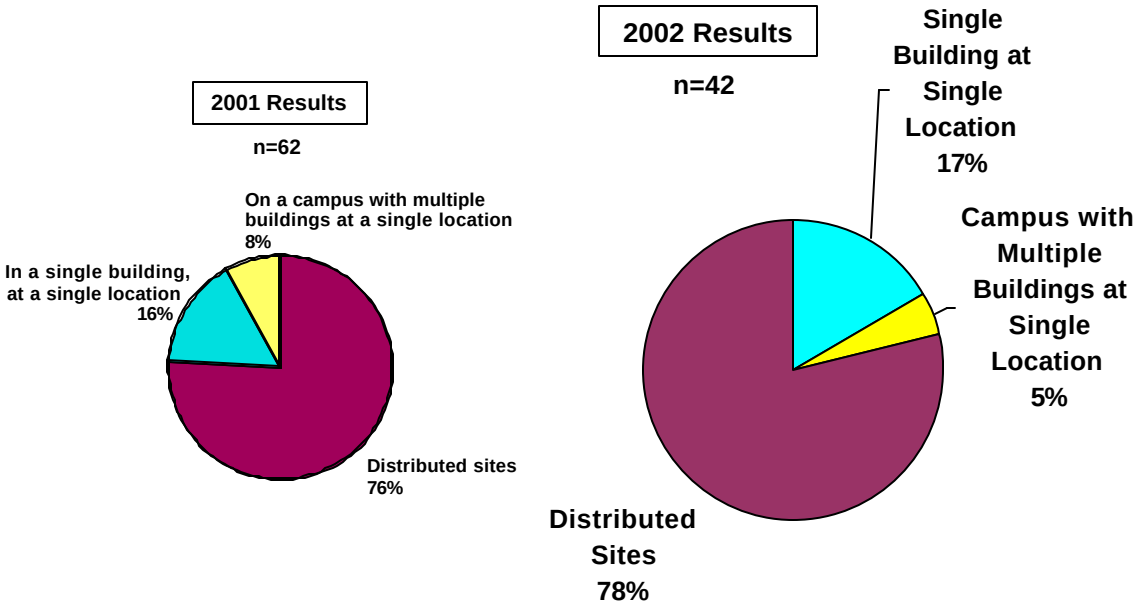
- A similar group of professionals was reached in this year's survey
- 95% of those polled have either major input or final decision-making authority in network services purchasing decisions



NETWORK ENVIRONMENT

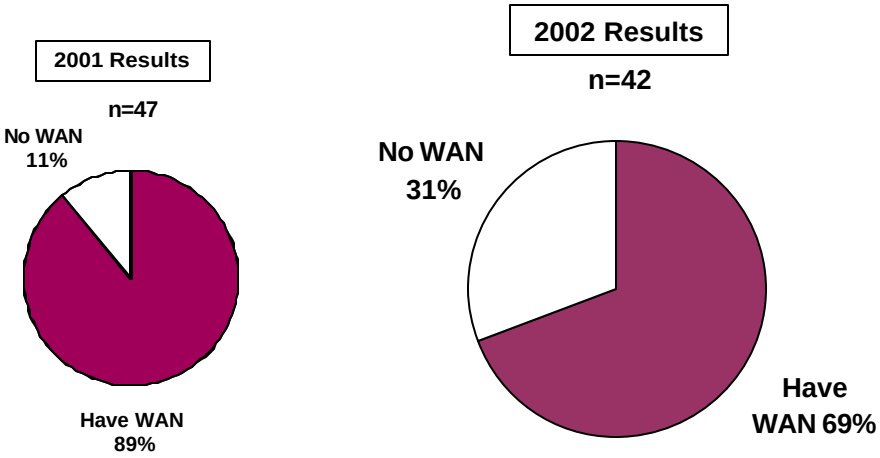
QUESTION 1: WHICH OF THE FOLLOWING BEST DESCRIBES HOW YOUR AGENCY IS DISTRIBUTED?

- Most of those polled are in a geographically distributed environment
- There is a very slight increase in the percentage of respondents that work in a distributed environment over the previous survey



QUESTION 2: DO YOU HAVE A WIDE-AREA NETWORK (WAN) IN PLACE THAT CONNECTS 2 OR MORE OF YOUR AGENCY'S LOCATIONS?

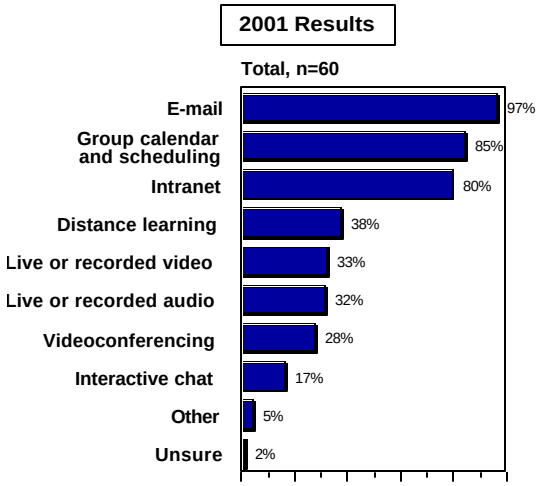
- The percentage of agencies with WANs decreased in this year's survey
- This unusual decrease may be attributed to the different sample groups

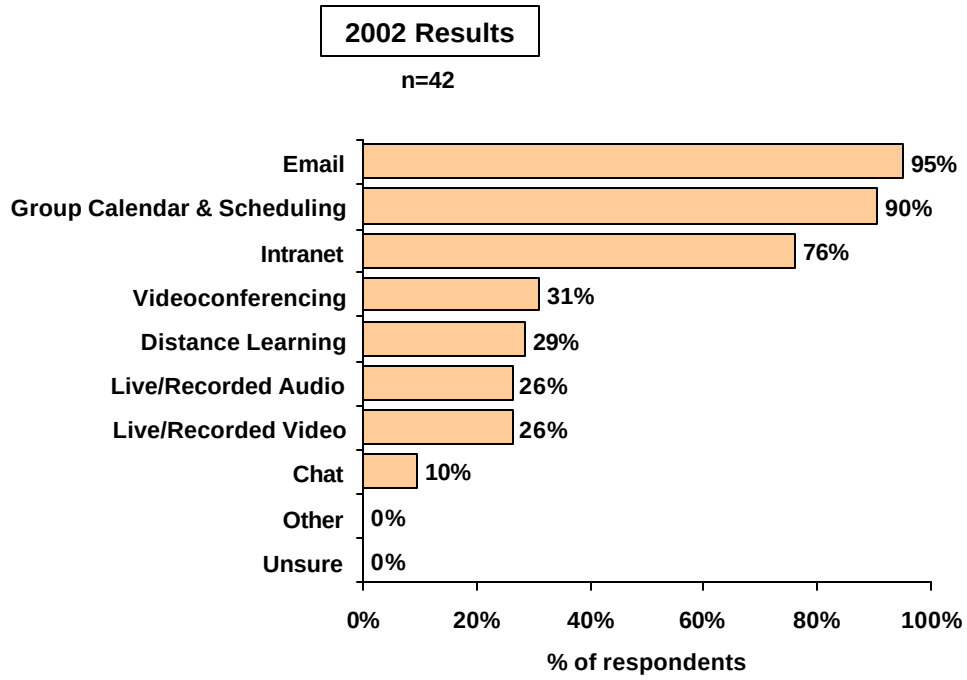


NETWORK SERVICES

QUESTION 3: WHICH OF THE FOLLOWING NETWORK-RELATED SERVICES OR APPLICATIONS ARE AVAILABLE ON YOUR NETWORK?

- Respondents are mostly offering the same applications and services on their network
- Fewer of this year's respondents offered distance learning and live/recorded video and audio



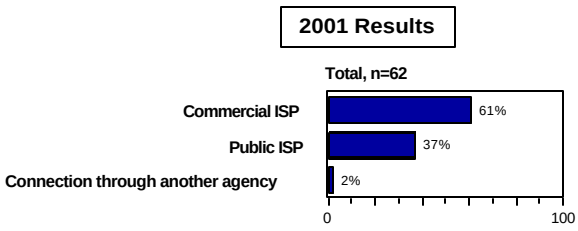


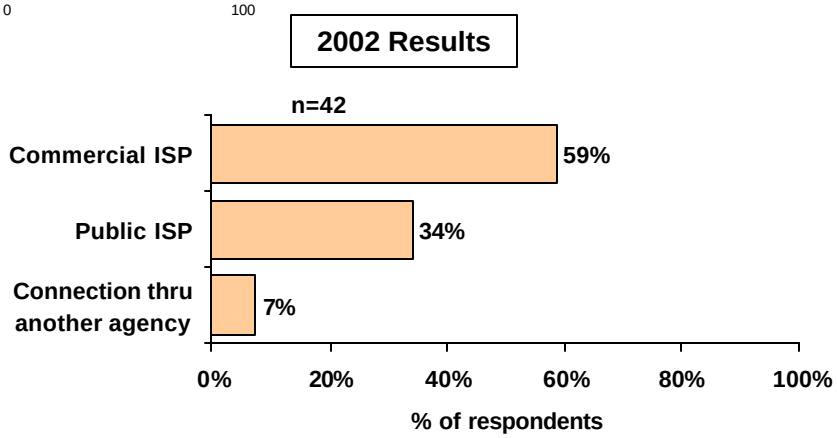
QUESTION 4: DO YOU HAVE ACCESS TO THE INTERNET FROM YOUR NETWORK?

- All respondents in 2001 had Internet access.
- One respondent in 2002 did not have Internet access.

QUESTION 5: IS YOUR NETWORK CONNECTED TO THE INTERNET BY . . .?

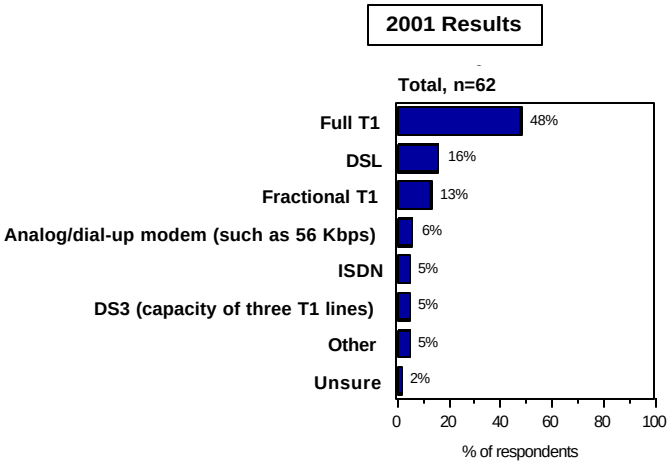
The majority of respondents still connect to the Internet through a commercial provider.

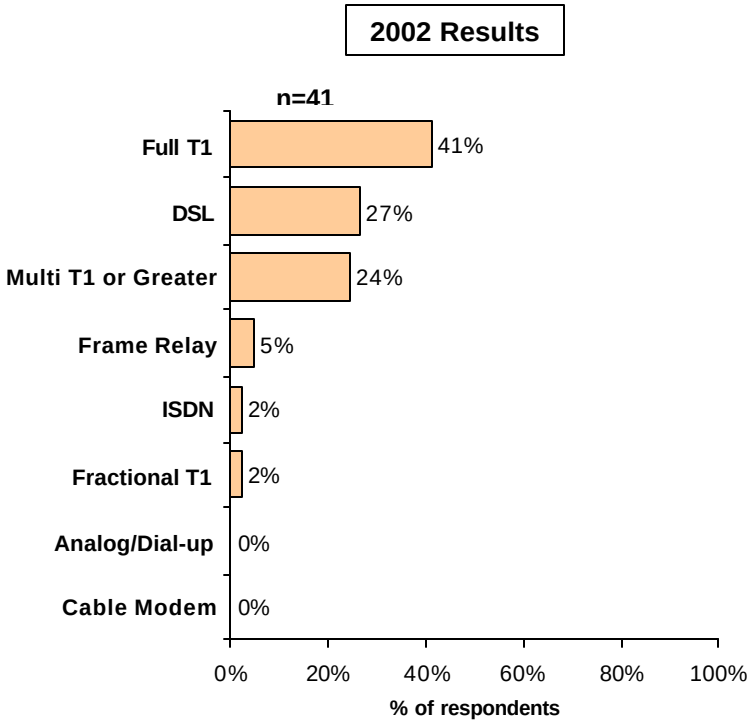




QUESTION 5A: WHICH OF THE FOLLOWING DESCRIBES YOUR PRIMARY LINK TO THE INTERNET?

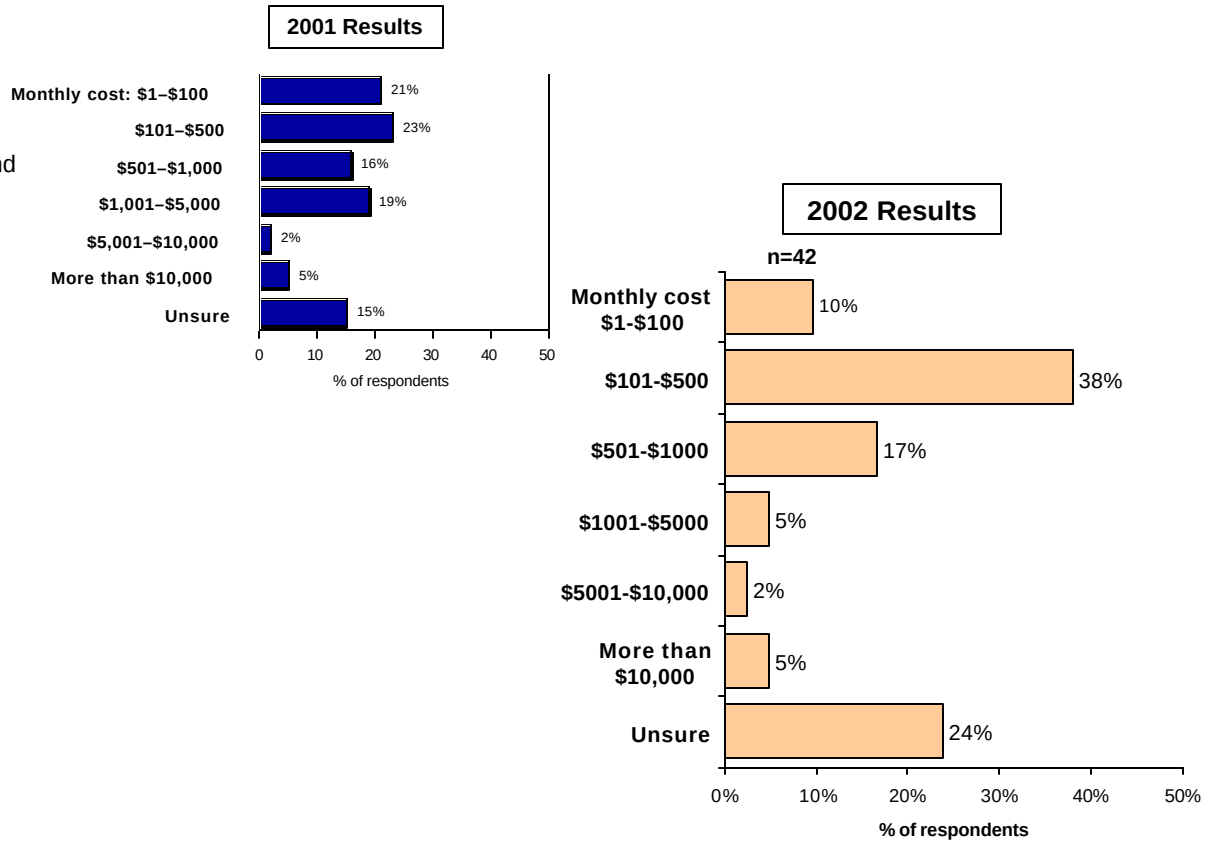
- The majority of agencies surveyed use T1 connections to the Internet – similar to last year
- The percentage of customers with DSL and multi T1 or greater connections increased this year





QUESTION 5D: HOW MUCH PER MONTH DOES YOUR SITE CURRENTLY PAY FOR YOUR INTERNET CONNECTIVITY?

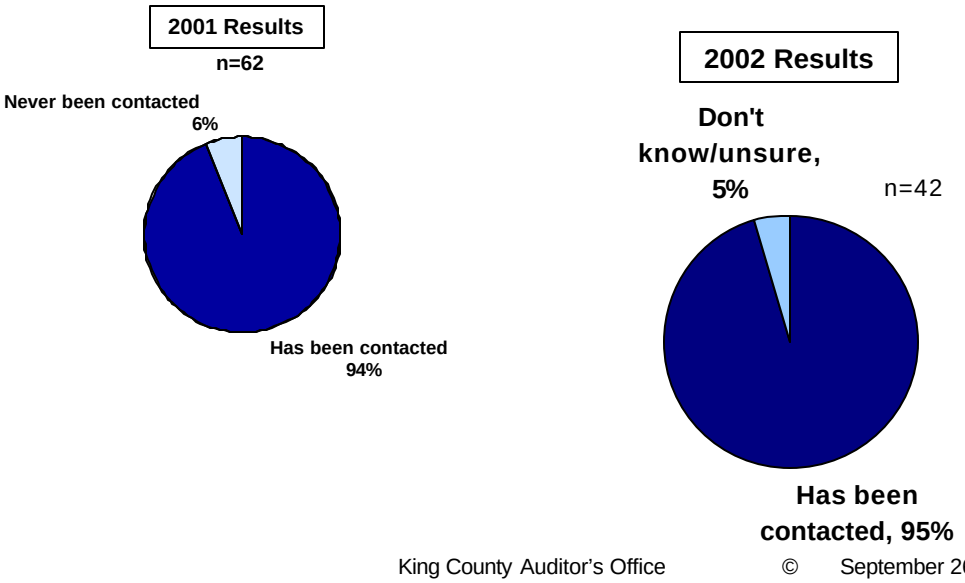
- Respondents were most likely to pay between $100 and $500 for their Internet connectivity.
- 24% were unsure about how much they paid



FAMILIARITY WITH/REACTION TO I-NET

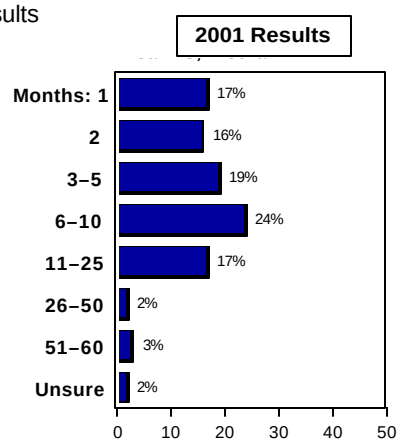
QUESTION 7: TO THE BEST OF YOUR KNOWLEDGE, HAVE YOU OR HAS ANYONE AT YOUR AGENCY SPOKEN WITH ANYONE AT KING COUNTY ABOUT I-NET PRIOR TO THIS SURVEY?

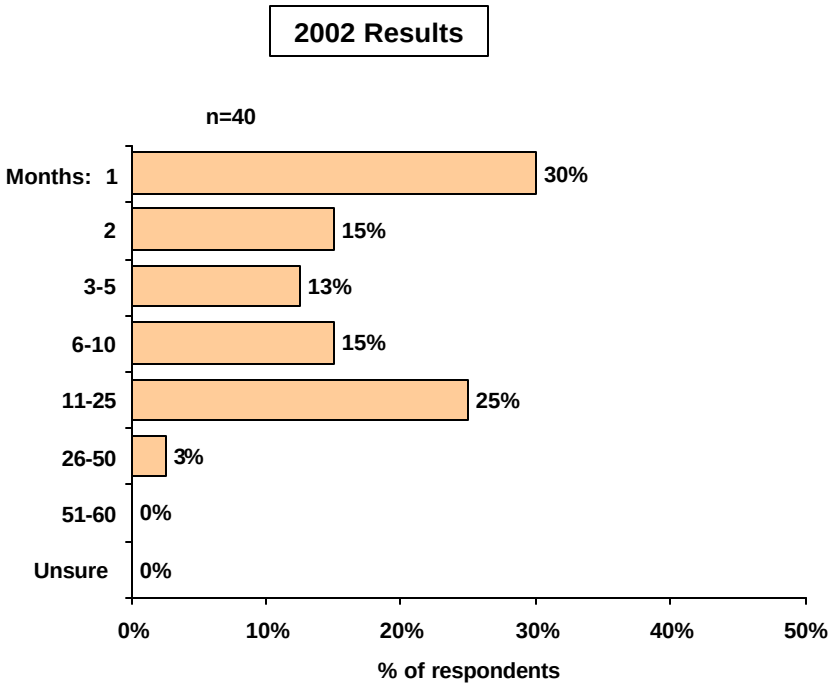
Virtually all respondents in both years had been contacted about I-Net previously.



QUESTION 8: HOW MANY MONTHS AGO WAS YOUR AGENCY'S MOST RECENT CONTACT WITH SOMEONE FROM KING COUNTY ABOUT I-NET, PRIOR TO THIS SURVEY?

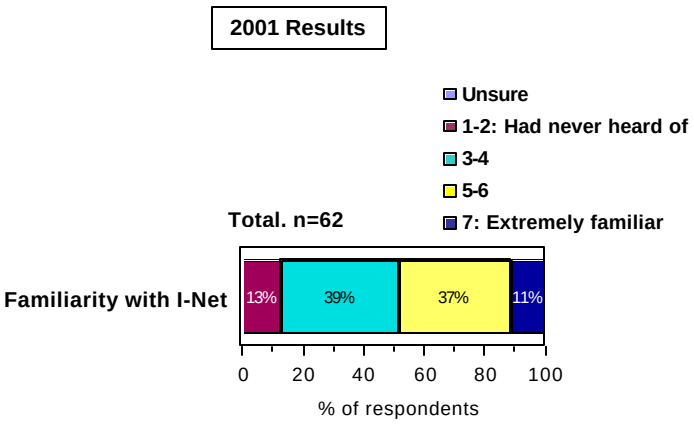
- Almost half of this year's respondents had been contacted about I-Net within the last two months
- A quarter of this year's respondents had not heard from I-Net in 11 to 25 months

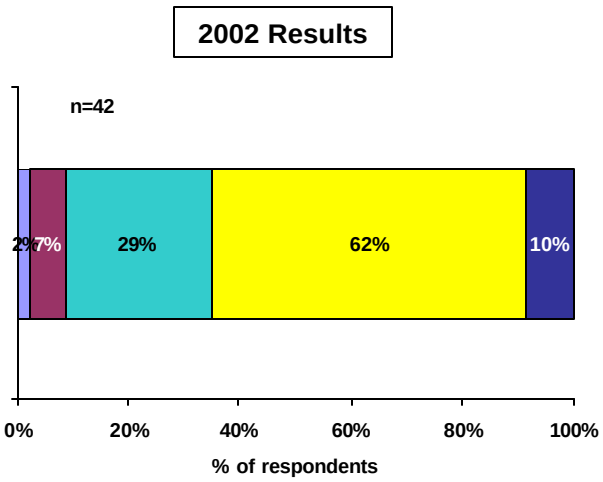




QUESTION 9: HOW WOULD YOU RATE YOUR FAMILIARITY WITH I-NET, BEFORE BEING CONTACTED FOR THIS SURVEY? USE A 7 POINT SCALE.

- This year's group indicated more familiarity with I-Net than last year's
- Few respondents had never heard of I-Net



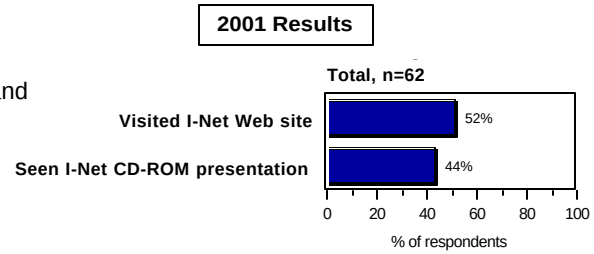


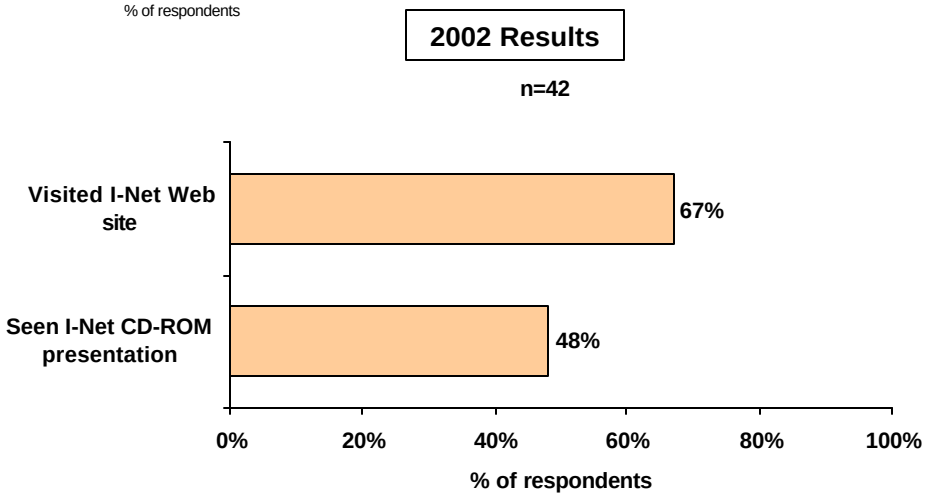
QUESTION 11: HAVE YOU EVER VISITED THE I-NET WEB SITE?

and

QUESTION 12: HAVE YOU EVER SEEN THE I-NET PRESENTATION ON CD-ROM?

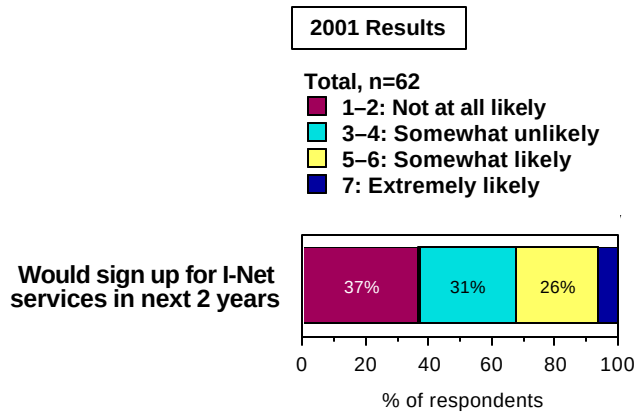
More of this year's respondents had viewed some of I-Net's marketing materials

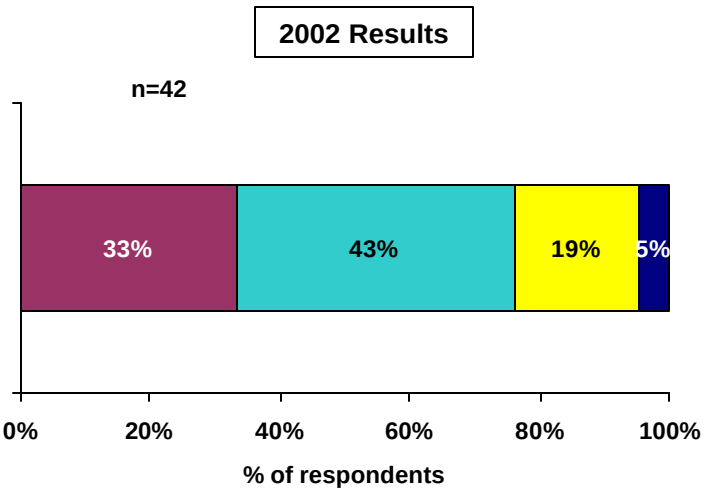




QUESTION 13: HOW LIKELY ARE YOU TO SIGN UP WITH THE I-NET WITHIN THE NEXT TWO YEARS?

- 37% of the agencies last year thought they were not likely to sign up with I-Net, while 31% felt they were somewhat unlikely to sign up
- 33% of this year's respondents considered themselves not likely to sign up with I-Net, while 43% thought they were somewhat unlikely to sign up





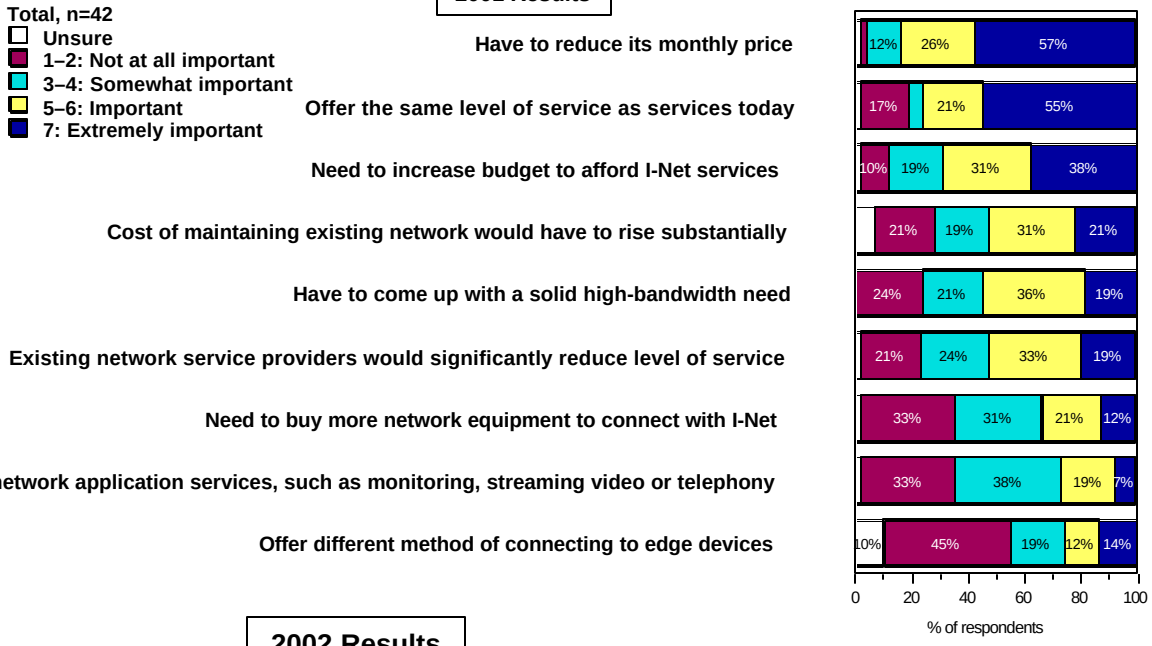
QUESTION 14A: IS ONE OF THE REASONS YOU RATED YOUR LIKELIHOOD LESS THAN A 5 BECAUSE YOU ARE SATISFIED WITH YOUR PRESENT NETWORK SERVICE PROVIDER? (N=32)

- In 2001, 71% responded "Yes."
- In 2002, 75% responded "Yes."

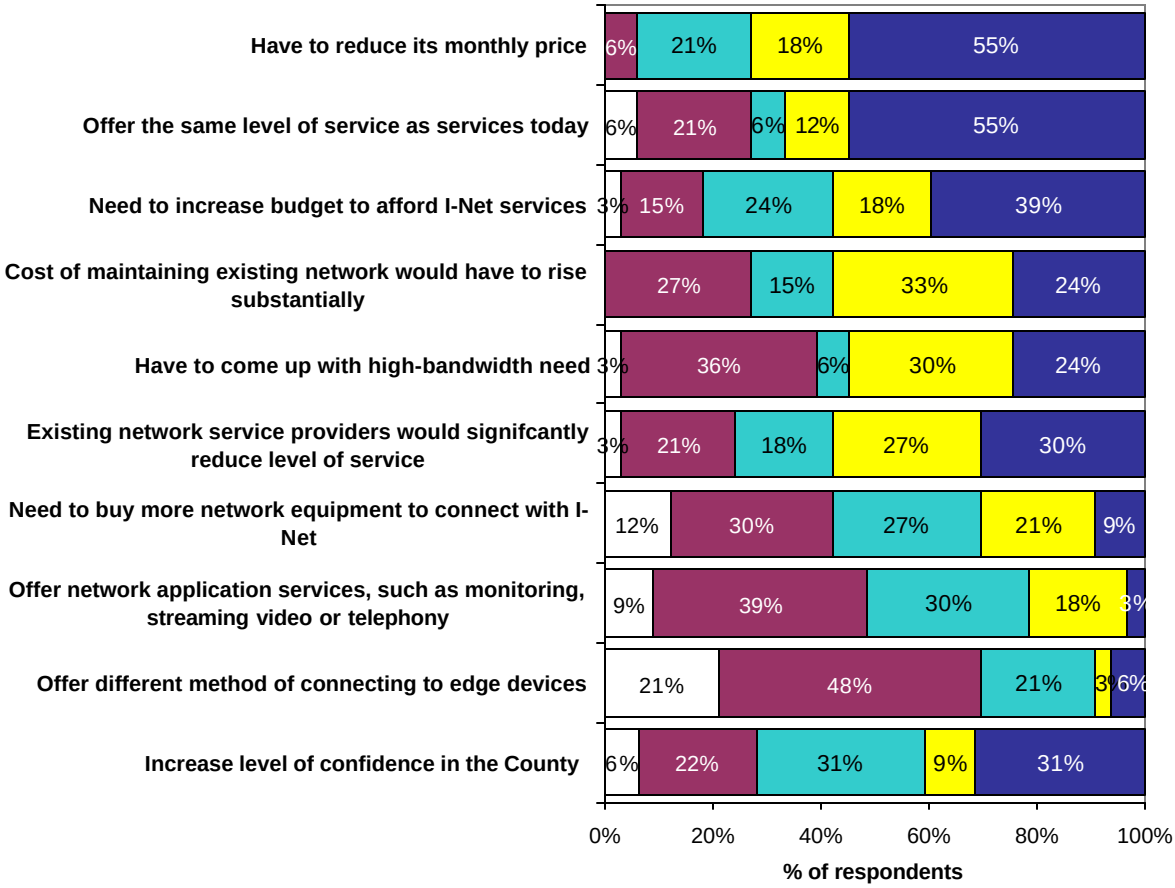
QUESTION 14B: TO ADOPT I-NET, HOW IMPORTANT IS IT FOR EACH OF THE FOLLOWING ITEMS TO BE TRUE?

- 40% felt their confidence in the County needed to increase before they would consider I-Net services (The statement was added to the survey this year.)
- Monthly price and service level continue to be key consideration factors

2001 Results

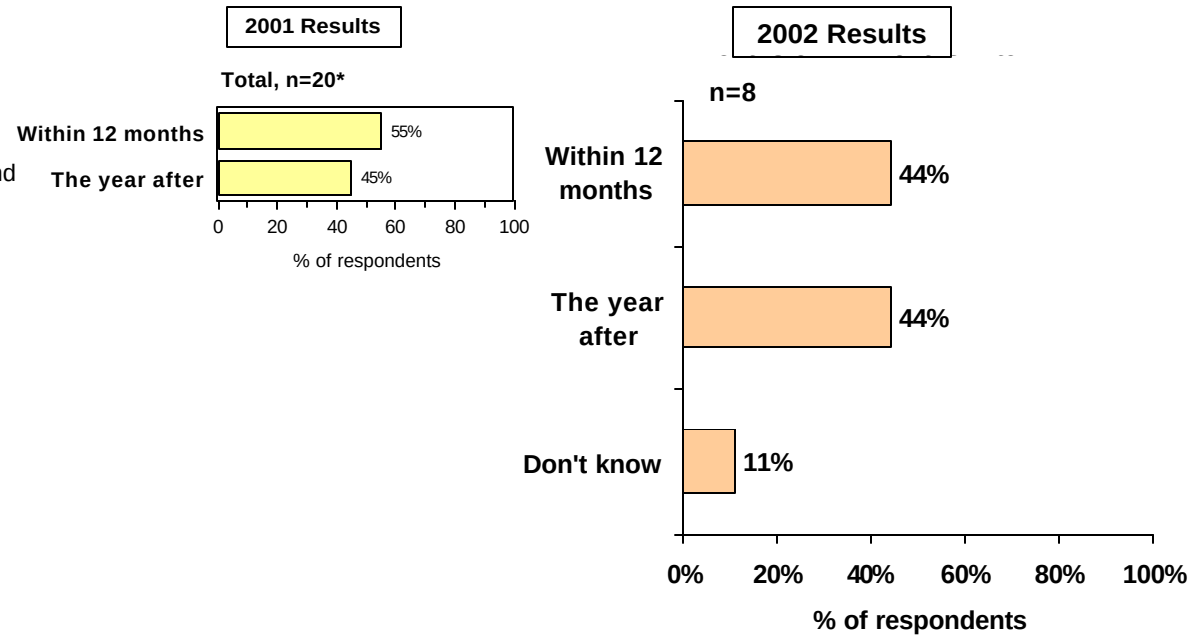


2002 Results n=33



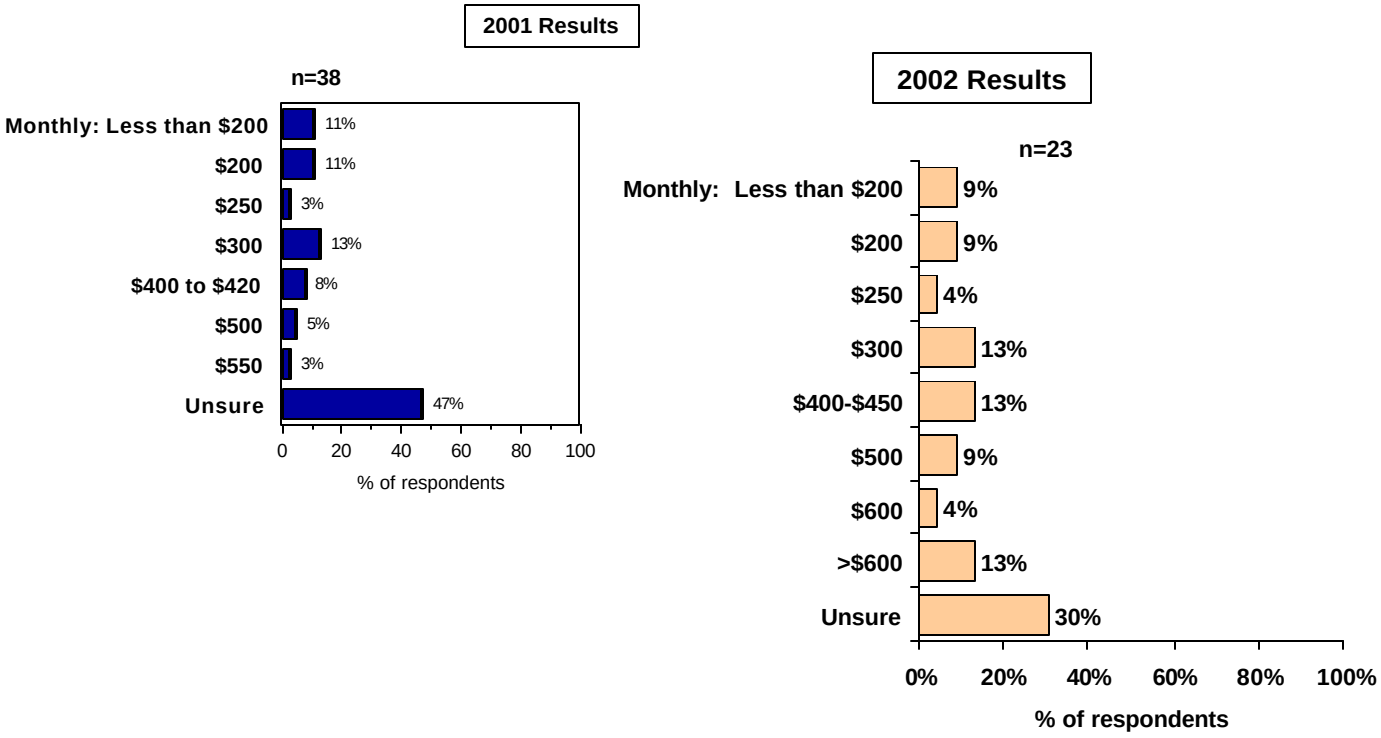
QUESTION 15A: (IF LIKELY TO SIGN UP) WOULD YOU SAY YOU ARE MORE LIKELY TO SIGN UP FOR I-NET WITHIN THE NEXT 12 MONTHS, OR THE YEAR AFTER THAT?

Those who thought they were likely to sign up were roughly divided over signing up this year and signing up next year.



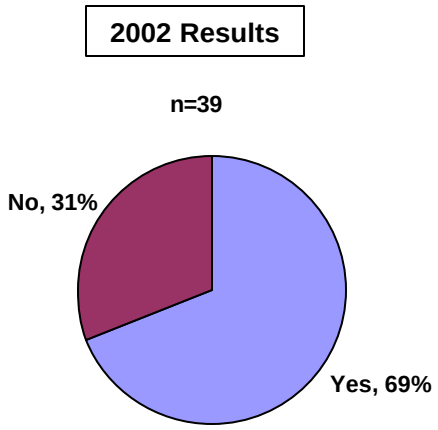
QUESTION 15C: AT WHAT MONTHLY PRICE WOULD YOU CONSIDER SIGNING UP WITH I-NET?

The average respondent was willing to consider I-Net at higher price points this year than the average respondent last year.



QUESTION 16: HAVE YOU INVESTIGATED OTHER COMPARABLE OPTIONS FOR BROADBAND NETWORK CONNECTIVITY?

In searching for network service providers, most respondents had investigated other options.



PARTICIPANTS

Auburn, City of	Kent, City of	Sammamish Plateau Water and Sewer District
Bellevue School District	Kirkland, City of	Sammamish, City of
Bellevue, City of	Lake Forest Park, City of	SCAN Communications Center
Bothell, City of	Lake Washington School District	Seattle Children's Museum
Carnation, City of	Lake Washington Technical College	Seattle Community Colleges
Experience Music Project	Maple Valley, City of	Seattle School District
Enumclaw School District	Mercer Island, City of	Seattle Symphony
Enumclaw, City of	Museum of Flight	Shoreline School District
Federal Way, City of	Normandy Park, City of	Shoreline, City of
Fred Hutch CRC	North Bend, City of	Snoqualmie Valley School District
Highline School District	Redmond, City of	Tukwila Police Department
Issaquah School District	Renton School District	Tukwila School District
KCTS-TV	Renton, City of	WA DOT Traffic Management Systems
Kenmore, City of	Riverview School District	Woodland Park Zoo

APPENDIX B

financial model

King County Auditor's Office
I-Net Performance Measures
September 26, 2002

APPENDIX B: I-NET FINANCIAL MODEL

This appendix presents the revenue and operations forecasts for three different scenarios of I-Net's market penetration and pricing model. A ten-year summary comparison of the three scenarios is shown on the next page, followed by the scenarios. We provide a breakeven analysis at the end of this appendix.

Category	Customers	% Customers	Sites	% Sites
King County	1	1%	53	19%
King County Libraries	1	1%	41	15%
Municipalities	27	37%	32	11%
Schools/Education	27	37%	133	48%
Other	17	23%	20	7%
Total	**73**	**100%**	**279**	**100%**

To offer additional context for the models, the table below shows the breakdown of I-Net's potential market according to sites per customer segment.

ITS provided the data above as the most recent counts of customers and sites. Please note that the customer and site totals in the table do not foot to other counts provided by ITS (i.e. approximately 81 customers and 288 sites). PTI used the latter numbers in the following financial analysis in order to maintain comparability with available ITS forecasts.

ASSUMPTIONS

Since this project scope did not include an operational review, PTI used ITS expenditure assumptions in developing the models. With the exception of a reduction to AT&T grant funds in Model 3, we also used ITS assumptions for non-subscriber revenue. To forecast the subscriber revenue for each model, the following assumptions were used:

MODEL 1 (PROVIDED BY ITS)

- Rate changes are based on ITS assumptions (i.e., rates consistently increase over time)
- Growth in active sites is based on ITS assumptions
- Forecast is extended for two years

MODEL 2

- Rates for King County, King County Libraries, and dark fiber sites increase each year at approximately two thirds of ITS' forecasted rate increase for that year
- The rate is $500 per month for half of the full service sites that fall into the categories of Schools, Municipalities, and Other – an approximate one-third reduction from current rates
- Sites forecasted in 2003 are based on the number of contracts in place as of second quarter 2002, plus the number of contracts projected to be in place or in negotiation by the end of the year (source: Second Quarter 2002 I-Net Financial Status Report)
- After 2003, the number of sites increase each year at approximately three fourths of ITS' forecasted increase in active sites for that year – after ITS' forecasted growth, sites continue to increase slightly for a few subsequent years

MODEL 3

- Rates do not increase
- The rate is $500 per month for all full service sites that fall into the categories of Schools, Municipalities, and Other

- Sites forecasted in 2003 are based on the number of contracts in place as of second quarter 2002 , plus approximately half of the number of contracts projected to be in place or in negotiation by the end of the year (source: Second Quarter 2002 I-Net Financial Status Report)
- After 2003, the number of sites increase each year at approximately half of ITS' forecasted increase in active sites for that year
- AT&T grant revenue is reduced by 50%.

MODELS

TEN YEAR SUMMARY

I-Net Operations Forecast - Ten Year Summary			
	Model 1	**Model 2**	**Model 3**
REVENUE			
General Revenue			
Capital Project Grant Transfer	299,823	299,823	299,823
AT&T Annual Grant	7,328,064	7,328,064	3,664,232
Applications & Transport Svc Fees	58,421	58,421	58,421
Installation and Service Fees	261,830	261,830	261,830
Interest	776,637	776,637	776,637
Total General Revenue	**8,724,774**	**8,724,774**	**5,060,942**
Subscription Revenue			
KC Revenue	5,045,320	4,609,920	3,939,600
KC Library Revenue	4,374,840	4,143,480	3,600,000
Schools Revenue	-	3,809,640	2,242,800
Municipalities Revenue	-	1,941,120	882,000
Other Revenue (Schools and Municipalities are included in Other Revenue for the Model 1 Forecast)	6,562,225	1,141,440	414,000
Dark Fiber Access Fees (included within each customer type)	3,192,300	-	-
Total Subscription Revenue	**19,174,685**	**15,645,600**	**11,078,400**
Sum of Revenue	**27,899,459**	**24,370,374**	**16,139,342**
EXPENDITURES			
Operations Staff Costs	5,522,889	5,522,889	5,522,889
Operations Overhead Costs	2,265,974	2,265,974	2,265,974
Infrastructure Support	1,831,293	1,831,293	1,831,293
Electronics Maintenance	6,124,636	6,124,636	6,124,636
Fiber Maintenance	190,139	190,139	190,139
Ancillary Equipment Maintenance	354,926	354,926	354,926
Equipment Purchase/Replacement	1,654,644	1,654,644	1,654,644
Bond Payment	6,596,383	6,596,383	6,596,383
Sum of Expenditures	**24,540,884**	**24,540,884**	**24,540,884**
GAIN/(LOSS)	**3,358,576**	**(170,509)**	**(8,401,541)**
Projected sites in 2012	**248**	**215**	**161**

MODEL 1

Model 1											
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	Ten Years
REVENUE											
Capital Project Grant Transfer		299,823									299,823
AT&T Annual Grant	-	526,464	880,200	870,600	861,000	851,400	841,800	832,200	832,200	832,200	7,328,064
Applications & Transport Svc Fees	1,594	3,281	6,094	6,277	6,465	6,659	6,859	7,064	7,064	7,064	58,421
Installation and Service Fees	60,230	58,650	36,150	36,150	39,900	21,150	2,400	2,400	2,400	2,400	261,830
KC Revenue	418,600	474,300	474,300	474,300	526,320	526,320	526,320	541,620	541,620	541,620	5,045,320
KC Library Revenue	367,500	410,820	410,820	410,820	455,100	455,100	455,100	469,860	469,860	469,860	4,374,840
Schools Revenue	-	-	-	-	-	-	-	-	-	-	-
Municipalities Revenue	-	-	-	-	-	-	-	-	-	-	-
Other Revenue (includes schools and Municipalities)	244,500	396,625	546,925	632,140	764,575	780,300	780,300	805,620	805,620	805,620	6,562,225
Dark Fiber Access Fees	187,800	247,830	308,880	319,110	349,920	349,920	349,920	359,640	359,640	359,640	3,192,300
Interest	8,583	49,087	61,106	64,857	74,200	87,133	98,475	111,066	111,066	111,066	776,637
Sum of Revenue	**1,288,807**	**2,466,880**	**2,724,474**	**2,814,253**	**3,077,480**	**3,077,981**	**3,061,173**	**3,129,470**	**3,129,470**	**3,129,470**	**27,899,459**
EXPENDITURES											
Operations Staff Costs	486,509	501,104	516,137	531,621	547,570	563,997	580,917	598,344	598,344	598,344	5,522,889
Operations Overhead Costs	198,550	209,118	214,615	219,941	225,426	231,412	237,232	243,226	243,226	243,226	2,265,974
Infrastructure Support	161,318	166,157	171,142	176,276	181,565	187,012	192,622	198,401	198,401	198,401	1,831,293
Electronics Maintenance	386,932	480,193	631,486	633,435	652,438	654,507	656,637	676,336	676,336	676,336	6,124,636
Fiber Maintenance	11,233	17,801	18,335	18,885	19,451	20,035	20,636	21,255	21,255	21,255	190,139
Ancillary Equipment Maintenance	20,969	33,228	34,224	35,251	36,309	37,398	38,520	39,676	39,676	39,676	354,926
Equipment Purchase/Replacement	-	45,719	201,116	201,116	201,116	201,116	201,116	201,116	201,116	201,116	1,654,644
Bond Payment	-	733,537	731,737	732,162	731,687	730,312	733,037	734,637	734,637	734,637	6,596,383
Sum of Expenditures	**1,265,511**	**2,186,857**	**2,518,792**	**2,548,687**	**2,595,562**	**2,625,788**	**2,660,716**	**2,712,990**	**2,712,990**	**2,712,990**	**24,540,884**
GAIN/(LOSS)	**23,296**	**280,023**	**205,683**	**265,566**	**481,918**	**452,193**	**400,457**	**416,480**	**416,480**	**416,480**	**3,358,576**

MODEL 1 REVENUE FORECAST

Model 1's detailed revenue forecast is not presented here, as it was taken directly from the forecast provided by ITS.

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I-NET PERFORMANCE MEASURES

Appendix B:

I-Net Financial Model

MODEL 2

Model 2											
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	Ten Years
REVENUE											
Capital Project Grant Transfer		299,823									299,823
AT&T Annual Grant	-	526,464	880,200	870,600	861,000	851,400	841,800	832,200	832,200	832,200	7,328,064
Applications & Transport Svc Fees	1,594	3,281	6,094	6,277	6,465	6,659	6,859	7,064	7,064	7,064	58,421
Installation and Service Fees	60,230	58,650	36,150	36,150	39,900	21,150	2,400	2,400	2,400	2,400	261,830
KC Revenue	411,600	441,000	441,000	441,000	476,280	476,280	476,280	482,160	482,160	482,160	4,609,920
KC Library Revenue	360,000	398,520	398,520	398,520	428,040	428,040	428,040	428,040	437,880	437,880	4,143,480
Schools Revenue	217,200	281,760	347,760	380,880	412,200	420,360	428,520	436,680	444,840	439,440	3,809,640
Municipalities Revenue	69,000	123,480	160,920	182,640	207,720	224,160	240,600	244,200	244,200	244,200	1,941,120
Other Revenue	51,000	98,040	107,760	107,760	119,520	125,520	131,520	133,440	133,440	133,440	1,141,440
Dark Fiber Access Fees (included in Schools)	-	-	-	-	-	-	-	-	-	-	-
Interest	8,583	49,087	61,106	64,857	74,200	87,133	98,475	111,066	111,066	111,066	776,637
Sum of Revenue	**1,179,207**	**2,280,105**	**2,439,509**	**2,488,683**	**2,625,325**	**2,640,701**	**2,654,493**	**2,677,250**	**2,695,250**	**2,689,850**	**24,370,374**
EXPENDITURES											
Operations Staff Costs	486,509	501,104	516,137	531,621	547,570	563,997	580,917	598,344	598,344	598,344	5,522,889
Operations Overhead Costs	198,550	209,118	214,615	219,941	225,426	231,412	237,232	243,226	243,226	243,226	2,265,974
Infrastructure Support	161,318	166,157	171,142	176,276	181,565	187,012	192,622	198,401	198,401	198,401	1,831,293
Electronics Maintenance	386,932	480,193	631,486	633,435	652,438	654,507	656,637	676,336	676,336	676,336	6,124,636
Fiber Maintenance	11,233	17,801	18,335	18,885	19,451	20,035	20,636	21,255	21,255	21,255	190,139
Ancillary Equipment Maintenance	20,969	33,228	34,224	35,251	36,309	37,398	38,520	39,676	39,676	39,676	354,926
Equipment Purchase/Replacement	-	45,719	201,116	201,116	201,116	201,116	201,116	201,116	201,116	201,116	1,654,644
Bond Payment	-	733,537	731,737	732,162	731,687	730,312	733,037	734,637	734,637	734,637	6,596,383
Sum of Expenditures	**1,265,511**	**2,186,857**	**2,518,792**	**2,548,687**	**2,595,562**	**2,625,788**	**2,660,716**	**2,712,990**	**2,712,990**	**2,712,990**	**24,540,884**
GAIN/(LOSS)	**(86,304)**	**93,248**	**(79,282)**	**(60,004)**	**29,763**	**14,913**	**(6,223)**	**(35,740)**	**(17,740)**	**(23,140)**	**(170,509)**

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I-NET PERFORMANCE MEASURES

Appendix B:

I-Net Financial Model

MODEL 2 REVENUE FORECAST

Model 2 Revenue Forecast

	2003			2004			2005			2006			2007			2008			2009			2010			2011			2012		
SOLD	**Sites**	**Rate**	**Revenue**	**Sites**	**Rate**	**Revenue**	**Sites**	**Rate**	**Revenue**	**Sites**	**Rate**	**Revenue**	**Sites**	**Rate**	**Revenue**	**Sites**	**Rate**	**Revenue**	**Sites**	**Rate**	**Revenue**	**Sites**	**Rate**	**Revenue**	**Sites**	**Rate**	**Revenue**	**Sites**	**Rate**	**Revenue**
KC Full	43	700	361,200	43	750	387,000	43	750	387,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
KC Dark Fiber	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
KC Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	43		361,200	43		387,000	43		387,000	-		-	-		-	-		-	-		-	-		-	-		-	-		-
KC Library Full	39	750	351,000	39	810	379,080	39	810	379,080	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
KC Library Dark Fiber	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
KC Library Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	39		351,000	39		379,080	39		379,080	-		-	-		-	-		-	-		-	-		-	-		-	-		-
Schools Full	7	750	63,000	7	810	68,040	7	810	68,040	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Schools Dark Fiber	13	300	46,800	13	320	49,920	13	320	49,920	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Schools Other	7	500	42,000	7	500	42,000	7	500	42,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	27		151,800	27		159,960	27		159,960	-		-	-		-	-		-	-		-	-		-	-		-	-		-
Munis Full	1	750	9,000	2	810	19,440	2	810	19,440	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Munis Dark Fiber	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Munis Other	1	500	6,000	1	500	6,000	1	500	6,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	2		15,000	3		25,440	3		25,440	-		-	-		-	-		-	-		-	-		-	-		-	-		-
Other Full	2	750	18,000	3	810	29,160	3	810	29,160	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Dark Fiber	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Other	1	500	6,000	1	500	6,000	1	500	6,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	3		24,000	4		35,160	4		35,160	-		-	-		-	-		-	-		-	-		-	-		-	-		-
FORECAST	**Sites**	**Rate**	**Revenue**	**Sites**	**Rate**	**Revenue**	**Sites**	**Rate**	**Revenue**	**Sites**	**Rate**	**Revenue**	**Sites**	**Rate**	**Revenue**	**Sites**	**Rate**	**Revenue**	**Sites**	**Rate**	**Revenue**	**Sites**	**Rate**	**Revenue**	**Sites**	**Rate**	**Revenue**	**Sites**	**Rate**	**Revenue**
KC Full	6	700	50,400	6	750	54,000	6	750	54,000	49	750	441,000	49	810	476,280	49	810	476,280	49	810	476,280	49	820	482,160	49	820	482,160	49	820	482,160
KC Dark Fiber	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
KC Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	6		50,400	6		54,000	6		54,000	49		441,000	49		476,280	49		476,280	49		476,280	49		482,160	49		482,160	49		482,160
KC Library Full	1	750	9,000	2	810	19,440	2	810	19,440	41	810	398,520	41	870	428,040	41	870	428,040	41	870	428,040	41	870	428,040	41	890	437,880	41	890	437,880
KC Library Dark Fiber	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
KC Library Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	1		9,000	2		19,440	2		19,440	41		398,520	41		428,040	41		428,040	41		428,040	41		428,040	41		437,880	41		437,880
Schools Full	1	750	9,000	3	810	29,160	5	810	48,600	14	810	136,080	15	870	156,600	15	870	156,600	15	870	156,600	15	870	156,600	15	870	156,600	15	840	151,200
Schools Dark Fiber	14	300	50,400	21	320	80,640	30	320	115,200	45	320	172,800	45	340	183,600	47	340	191,760	49	340	199,920	51	340	208,080	53	340	216,240	53	340	216,240
Schools Other	1	500	6,000	2	500	12,000	4	500	24,000	12	500	72,000	12	500	72,000	12	500	72,000	12	500	72,000	12	500	72,000	12	500	72,000	12	500	72,000
Total	16		65,400	26		121,800	39		187,800	71		380,880	72		412,200	74		420,360	76		428,520	78		436,680	80		444,840	80		439,440
Munis Full	4	750	36,000	7	810	68,040	9	810	87,480	12	810	116,640	13	870	135,720	14	870	146,160	15	870	156,600	15	890	160,200	15	890	160,200	15	890	160,200
Munis Dark Fiber	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Munis Other	3	500	18,000	5	500	30,000	8	500	48,000	11	500	66,000	12	500	72,000	13	500	78,000	14	500	84,000	14	500	84,000	14	500	84,000	14	500	84,000
Total	7		54,000	12		98,040	17		135,480	23		182,640	25		207,720	27		224,160	29		240,600	29		244,200	29		244,200	29		244,200
Other Full	3	750	27,000	4	810	38,880	5	810	48,600	8	810	77,760	8	870	83,520	8	870	83,520	8	870	83,520	8	890	85,440	8	890	85,440	8	890	85,440
Other Dark Fiber	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Other	3	-	-	4	500	24,000	4	500	24,000	5	500	30,000	6	500	36,000	7	500	42,000	8	500	48,000	8	500	48,000	8	500	48,000	8	500	48,000
Total	6		27,000	8		62,880	9		72,600	13		107,760	14		119,520	15		125,520	16		131,520	16		133,440	16		133,440	16		133,440
SOLD			903,000			986,640			986,640			-			-			-			-			-			-			-
FORECASTED			205,800			356,160			469,320			1,510,800			1,643,760			1,674,360			1,704,960			1,724,520			1,742,520			1,737,120
TOTAL			1,108,800			1,342,800			1,455,960			1,510,800			1,643,760			1,674,360			1,704,960			1,724,520			1,742,520			1,737,120

MODEL 3

Model 3											
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	Ten Years
REVENUE											
Capital Project Grant Transfer		299,823									299,823
AT&T Annual Grant	-	263,232	440,100	435,300	430,500	425,900	420,900	416,100	416,100	416,100	3,664,232
Applications & Transport Svc Fees	1,594	3,281	6,094	6,277	6,465	6,659	6,859	7,064	7,064	7,064	58,421
Installation and Service Fees	60,230	58,650	36,150	36,150	39,900	21,150	2,400	2,400	2,400	2,400	261,830
KC Revenue	386,400	394,800	394,800	394,800	394,800	394,800	394,800	394,800	394,800	394,800	3,939,600
KC Library Revenue	360,000	360,000	360,000	360,000	360,000	360,000	360,000	360,000	360,000	360,000	3,600,000
Schools Revenue	162,000	188,400	218,400	234,000	240,000	240,000	240,000	240,000	240,000	240,000	2,242,800
Municipalities Revenue	42,000	60,000	78,000	90,000	102,000	102,000	102,000	102,000	102,000	102,000	882,000
Other Revenue	36,000	42,000	42,000	42,000	42,000	42,000	42,000	42,000	42,000	42,000	414,000
Dark Fiber Access Fees (included in Schools)											-
Interest	8,583	49,087	61,106	64,857	74,200	87,133	98,475	111,066	111,066	111,066	776,637
Sum of Revenue	**1,056,807**	**1,719,273**	**1,636,649**	**1,663,383**	**1,689,865**	**1,679,641**	**1,667,433**	**1,675,430**	**1,675,430**	**1,675,430**	**16,139,342**
EXPENDITURES											
Operations Staff Costs	486,509	501,104	516,137	531,621	547,570	563,997	580,917	598,344	598,344	598,344	5,522,889
Operations Overhead Costs	198,550	209,118	214,615	219,941	225,426	231,412	237,232	243,226	243,226	243,226	2,265,974
Infrastructure Support	161,318	166,157	171,142	176,276	181,565	187,012	192,622	198,401	198,401	198,401	1,831,293
Electronics Maintenance	386,932	480,193	631,486	633,435	652,438	654,507	656,637	676,336	676,336	676,336	6,124,636
Fiber Maintenance	11,233	17,801	18,335	18,885	19,451	20,035	20,636	21,255	21,255	21,255	190,139
Ancillary Equipment Maintenance	20,969	33,228	34,224	35,251	36,309	37,398	38,520	39,676	39,676	39,676	354,926
Equipment Purchase/Replacement	-	45,719	201,116	201,116	201,116	201,116	201,116	201,116	201,116	201,116	1,654,644
Bond Payment	-	733,537	731,737	732,162	731,687	730,312	733,037	734,637	734,637	734,637	6,596,383
Sum of Expenditures	**1,265,511**	**2,186,857**	**2,518,792**	**2,548,687**	**2,595,562**	**2,625,788**	**2,660,716**	**2,712,990**	**2,712,990**	**2,712,990**	**24,540,884**
GAIN/(LOSS)	**(208,704)**	**(467,584)**	**(882,142)**	**(885,304)**	**(905,697)**	**(946,147)**	**(993,283)**	**(1,037,560)**	**(1,037,560)**	**(1,037,560)**	**(8,401,541)**

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I-NET PERFORMANCE MEASURES

Appendix B:

I-Net Financial Model

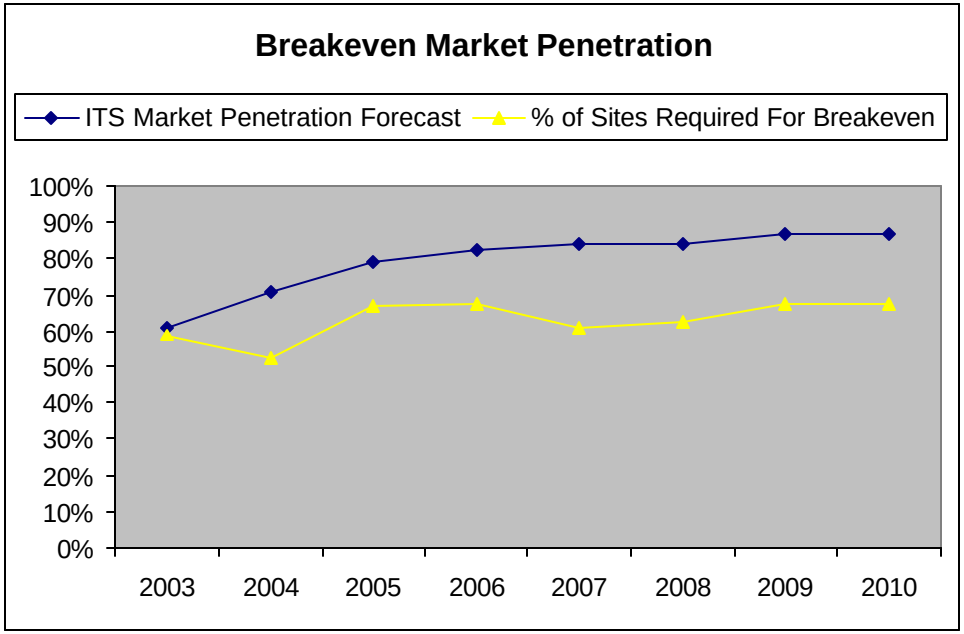
MODEL 3 REVENUE FORECAST

Model Three Revenue Forecast

	2003			2004			2005			2006			2007			2008			2009			2010			2011			2012		
SOLD	**Sites**	**Rate**	**Revenue**	**Sites**	**Rate**	**Revenue**	**Sites**	**Rate**	**Revenue**	**Sites**	**Rate**	**Revenue**	**Sites**	**Rate**	**Revenue**	**Sites**	**Rate**	**Revenue**	**Sites**	**Rate**	**Revenue**	**Sites**	**Rate**	**Revenue**	**Sites**	**Rate**	**Revenue**	**Sites**	**Rate**	**Revenue**
KC Full	43	700	361,200	43	700	361,200	43	700	361,200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
KC Dark Fiber	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
KC Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	43		361,200	43		361,200	43		361,200	-		-	-		-	-		-	-		-	-		-	-		-	-		-
KC Library Full	39	750	351,000	39	750	351,000	39	750	351,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
KC Library Dark Fiber	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
KC Library Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	39		351,000	39		351,000	39		351,000	-		-	-		-	-		-	-		-	-		-	-		-	-		-
Schools Full	14	500	84,000	14	500	84,000	14	500	84,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Schools Dark Fiber	13	300	46,800	13	300	46,800	13	300	46,800	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Schools Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	27		130,800	27		130,800	27		130,800	-		-	-		-	-		-	-		-	-		-	-		-	-		-
Munis Full	3	500	18,000	3	500	18,000	3	500	18,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Munis Dark Fiber	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Munis Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	3		18,000	3		18,000	3		18,000	-		-	-		-	-		-	-		-	-		-	-		-	-		-
Other Full	3	500	18,000	3	500	18,000	3	500	18,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Dark Fiber	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	3		18,000	3		18,000	3		18,000	-		-	-		-	-		-	-		-	-		-	-		-	-		-
FORECAST	**Sites**	**Rate**	**Revenue**	**Sites**	**Rate**	**Revenue**	**Sites**	**Rate**	**Revenue**	**Sites**	**Rate**	**Revenue**	**Sites**	**Rate**	**Revenue**	**Sites**	**Rate**	**Revenue**	**Sites**	**Rate**	**Revenue**	**Sites**	**Rate**	**Revenue**	**Sites**	**Rate**	**Revenue**	**Sites**	**Rate**	**Revenue**
KC Full	3	700	25,200	4	700	33,600	4	700	33,600	47	700	394,800	47	700	394,800	47	700	394,800	47	700	394,800	47	700	394,800	47	700	394,800	47	700	394,800
KC Dark Fiber	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
KC Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	3		25,200	4		33,600	4		33,600	47		394,800	47		394,800	47		394,800	47		394,800	47		394,800	47		394,800	47		394,800
KC Library Full	1	750	9,000	1	750	9,000	1	750	9,000	40	750	360,000	40	750	360,000	40	750	360,000	40	750	360,000	40	750	360,000	40	750	360,000	40	750	360,000
KC Library Dark Fiber	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
KC Library Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	1		9,000	1		9,000	1		9,000	40		360,000	40		360,000	40		360,000	40		360,000	40		360,000	40		360,000	40		360,000
Schools Full	1	500	6,000	3	500	18,000	5	500	30,000	21	500	126,000	22	500	132,000	22	500	132,000	22	500	132,000	22	500	132,000	22	500	132,000	22	500	132,000
Schools Dark Fiber	7	300	25,200	11	300	39,600	16	300	57,600	30	300	108,000	30	300	108,000	30	300	108,000	30	300	108,000	30	300	108,000	30	300	108,000	30	300	108,000
Schools Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	8		31,200	14		57,600	21		87,600	51		234,000	52		240,000	52		240,000	52		240,000	52		240,000	52		240,000	52		240,000
Munis Full	4	500	24,000	7	500	42,000	10	500	60,000	15	500	90,000	17	500	102,000	17	500	102,000	17	500	102,000	17	500	102,000	17	500	102,000	17	500	102,000
Munis Dark Fiber	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Munis Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	4		24,000	7		42,000	10		60,000	15		90,000	15		102,000	15		102,000	15		102,000	15		102,000	15		102,000	15		102,000
Other Full	3	500	18,000	4	500	24,000	4	500	24,000	7	500	42,000	7	500	42,000	7	500	42,000	7	500	42,000	7	500	42,000	7	500	42,000	7	500	42,000
Other Dark Fiber	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	3		18,000	4		24,000	4		24,000	7		42,000	7		42,000	7		42,000	7		42,000	7		42,000	7		42,000	7		42,000
SOLD			879,000			879,000			879,000			-			-			-			-			-			-			-
FORECASTED			107,400			166,200			214,200			1,120,800			1,138,800			1,138,800			1,138,800			1,138,800			1,138,800			1,138,800
TOTAL			986,400			1,045,200			1,093,200			1,120,800			1,138,800			1,138,800			1,138,800			1,138,800			1,138,800			1,138,800

BREAKEVEN ANALYSIS

Holding constant the relative revenue ratios of full service sites and dark service sites, the following chart projects the market penetration required for breakeven on a year by year basis. Please note that the analysis is based on ITS financial forecasts (i.e., it assumes that rates increase, expenses remain flat, and no major capital expenditure is required).



APPENDIX C

other I-Nets

APPENDIX C: RESEARCH RESULTS ON OTHER I-NETS

As part of this project, PTI performed research on other similar network efforts in the country. PTI contacted AT&T and Comcast and they provided us with seven I-Net jurisdictions that are potentially reselling services. The candidate organizations included:

- Montgomery County, MD
- City of Tucson, AZ
- City of Portland, OR
- City of Venture, CA
- City of Mountain View, CA
- City of Cincinnati, OH
- City of Iowa, IA

We also contacted Information Renaissance, a non profit agency offering network services in Pittsburgh, PA.

These four of the eight organizations responded and provided some of the requested information:

- Montgomery County, MD
- City of Tucson, AZ
- City of Portland, OR
- Information Renaissance, Pittsburgh, PA (non profit agency)

The table on the next page presents a summary view of these organizations. The section below highlights their common aspects.

KEY FINDINGS

- **Few of the agencies surveyed have begun to charge for network services.** Some agencies have developed pricing models and established potential rates, but only one has implemented paid services. Prices range from approximately $100-$833 per month. Correspondingly, most of the agencies currently subsidize the networks with general fund (or equivalent) monies.
- **Networks are still in development.** Agencies surveyed are still building out and connecting more sites to their networks. Organizations appear to be taking on a build-as-needed approach to extending their networks.
- **Performance measures and SLAs are not frequently used.** With the exception of FiberNet in Montgomery County, Maryland, who has SLAs in place with its contractor, none of the respondents had established measures for gauging the networks' success or service level agreements for setting support expectations.

RESEARCH RESULTS

Agency	Active Sites	Total Sites	Entities Served	I-Net Support Staff	SLAs	Services Offered	Monthly Cost of I-Net Service
Montgomery County, MD (FiberNet)	Approximately 150	255	County government, public schools, colleges, parks	15 contracted staff	SLAs with system integrator: 99.9% network uptime, 2 hour on-site response time, 24x7 operations	WAN connectivity, Internet access	Plans to charge $833 per site (all funding is currently from the general fund)
City of Pittsburgh, PA (Information Renaissance)	5 sites (1 site has 45 customers, remaining sites have 1-3 customers connected via wireless network)	5 (build-out of new sites continues as grant money is received and need is established)	Non-profit community programs, government agencies, eventually to include small for-profit organizations	2	None	WAN connectivity, Internet access	Charges $100-$250 per customer, depending on bandwidth
City of Tucson, AZ (I-Net)	70 (currently all city sites)	91, build-out of new sites continues on an as-needed basis	City government, libraries, schools	2	None	WAN connectivity	City sites are not charged; County, non-profit, and education sites will be charged a fee
City of Portland, OR (Integrated Regional Network Enterprise – IRNE)	Approximately 75 customers at 4 sites	Not verified	City government, schools	4	None	WAN connectivity, Internet access, dial tone and Centrex services, network monitoring and management,	Plans to charge $520 per customer, not clear which services are included in the fees

APPENDIX D

list of participants

King County Auditor's Office
I-Net Performance Measures
September 26, 2002

APPENDIX D: LIST OF PARTICIPANTS

NAME	TITLE	DIVISION/AREA
Addis, Leslie	Budget Analyst	King County Budget Office
Alvine, Mike	Legislative Lead Analyst	King County Analyst
Anthony, John	Assistant Manager	King County Information and Telecommunications Services Division
Broom, Cheryle	County Auditor	King County Auditor
Constantine, Dow	Councilmember	King County Council
Hague, Jane	Councilmember	King County Council
Irons, David	Councilmember	King County Council
Kearns, Kevin	Manager	King County Information and Telecommunications Services Division
Larson, Barbara	Network Operations Center Supervisor	King County Information and Telecommunications Services Division
Moffitt, Jed	Associate Director of IT Services	King County Library System
Perry, Ron	Principal Management Auditor	King County Auditor
Quick, Bob	Technology and Operations Manager	King County Information and Telecommunications Services Division
Randall, David	Legislative Analyst	King County Council
Richardson, Betty	Network & System Engineering Service Manager	King County Information and Telecommunications Services Division
Sheppard, Mark	Director, IT	Seattle Public Utilities
Spencer, Dana	Business Development and Finance Manager	Office of Information Resource Management
Sullivan, Pat	Legislative Aide	King County Council
Turpen, Janet	Director of Franchising and Local Government Affairs	AT&T Broadband – WA Market

APPENDIX E

task force charter

King County Auditor's Office
I-Net Performance Measures
September 26, 2002

APPENDIX E: TASK FORCE CHARTER

The following outlines the project task force composition and charter. The King County Council requested that the County Auditor's office develop a set of performance measures and associated benchmarks and reporting mechanisms to for the County's I-Net, or institutional network. The Auditor chartered a multi-disciplinary task force to assist in this effort. This document presents the charter for that task force. It is organized as follows:

- **Purpose** describes the goal and responsibilities of the task force
- **Membership** lists the members of the task force
- **Chair** describes the roles and responsibilities of the task force chair
- **Decision Making** explains the process for how decisions were reached

PURPOSE

This task force was chartered to:

- Advise on the development of tracking mechanisms for I-Net performance measures
- Review draft reports from the project's consultants
- Review relevant interim work products from the project's consultants
- Provide resources to the project as appropriate
- Review and provide feedback on an I-Net financial model and associated assumptions
- Participate in task force workshops

The task force will be disbanded at the end of the project.

MEMBERSHIP

At the request of the auditor's office, the following people agreed to serve as full members on the task force:

- Jed Moffit, King County Library System
- Dana Spencer, Office of Information Resources Management
- Leslie Addis, King County Budget Office
- Kevin Kearns, King County ITS
- John Anthony, King County ITS
- Barbara Larson, King County I-Net
- Mike Alvine, King County Council
- David Randall, King County Council's Office
- Janet Turpen, AT&T Broadband
- Pat Sullivan, King County Council
- Cheryle Broom, King County Auditor
- Ron Perry, King County Auditor's Office
- Mike Silverman, David Robison, Judy Cheng, PTI

Designated alternates may attend meetings in place of full members by notifying the chair.

CHAIR

Ron Perry served as the task force's chair and was responsible for:

- Meeting logistics
- Distribution of materials
- Coordinating communication with members
- Keeping the County Auditor appraised of task force progress
- Scheduling meetings on an as-needed basis

With assistance from the consultant, the chair:

- Facilitated discussion
- Gained consensus on decisions
- Set meeting agendas

DECISION MAKING

The task force was advisory in nature and did not make final decisions regarding performance measures, benchmarks, or reporting mechanisms. The task force used a consensus model for making advisory recommendations. The task force reached consensus when all members could accept the recommendation, even if they did not fully agree with it. In the absence of consensus, the chair would note objections.

Authority to make all final decisions rests in the Auditor's office.

APPENDIX F

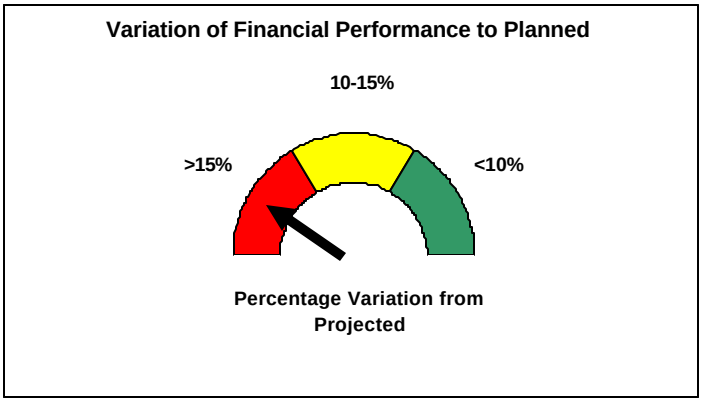
I-Net performance measures to date

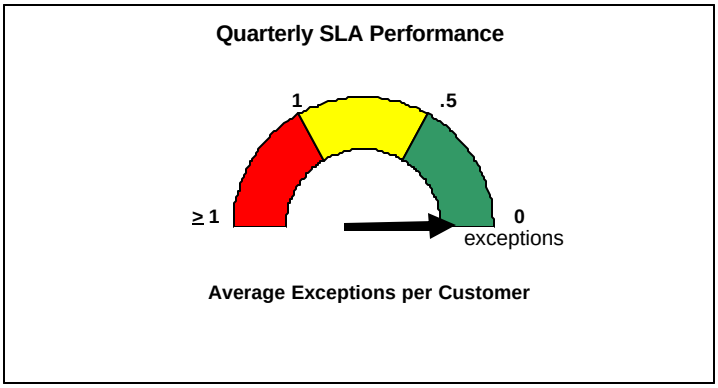
King County Auditor's Office
I-Net Performance Measures
September 26, 2002

APPENDIX F: I-NET PERFORMANCE MEASURES TO DATE

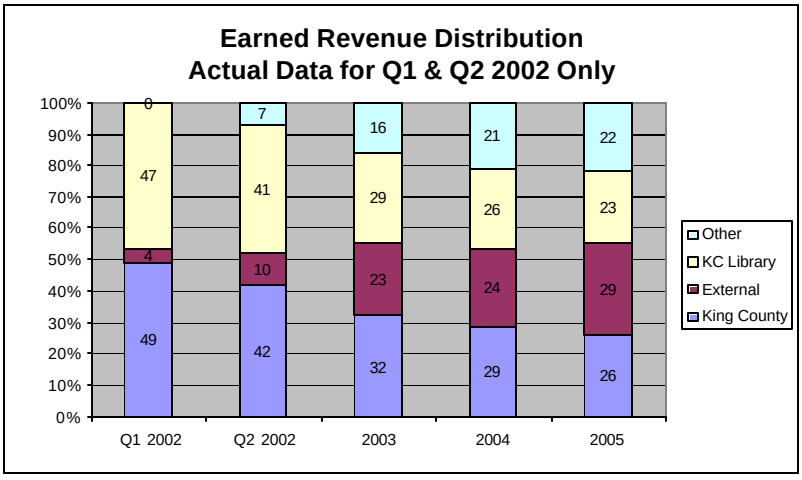
This appendix provides an example of actual data in the suggested reporting formats. ITS provided the charts below which represents a sample of how this data will be presented. PTI did not perform any data validation. Please refer to Chapters Three and Four for metric definitions and/or chart descriptions.

DASHBOARDS





ADDITIONAL METRICS



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I-NET PERFORMANCE MEASURES

Appendix F:

I-Net Performance Measures To Date